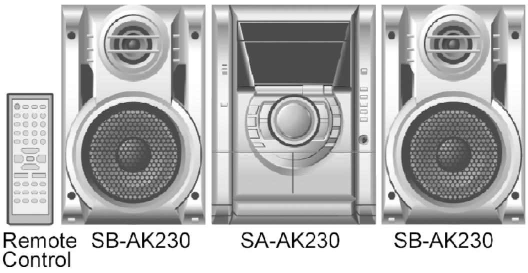
ORDER NO. MD0502042C3

Service Manual

CD Stereo System

SA-AK230GT

Colour
(S)... Silver Type


Remote Control
SB-AK230
SA-AK230
SB-AK230

■ AMPLIFIER SECTION

RMS output power	
THD 10%, both channels driven	
1 kHz	100 W per channel (5 Ω)
Total RMS power	200 W
PMPO	2000 W

■ FM/AM TUNER, TERMINALS SECTION

Preset station	FM 15 stations
	AM 15 stations
Frequency Modulation (FM)	
Frequency range	
	87.50 - 108.00 MHz (50 kHz steps)
Sensitivity	2.5 μV (IHF)
S/N 26 dB	2.2 μV
Antenna terminal(s)	75 Ω (unbalanced)
Amplitude Modulation (AM)	
Frequency range	522 - 1629 kHz (9 kHz steps)
	520 - 1630 kHz (10 kHz steps)
Sensitivity	
S/N 20 dB (at 999 kHz)	560 μV/m
Audio performance (Amplifier)	
Input sensitivity/Input impedance	
Aux	250 mV,14.7 kΩ
Phone jack	
Terminal	Stereo, 3.5 mm jack

■ CASSETTE DECK SECTION

Track system	4 track, 2 channel
Heads	
Record/playback	Solid permalloy head
Erasure	Double gap ferrite head
Motor	DC servo motor
Recording system	AC bias 100 kHz
Erasing system	AC erase 100 kHz
Tape speed	4.8 cm/s
Overall frequency response (+3 dB, -6 dB at DECK OUT)	
NORMAL	35 Hz - 14 kHz
S/N	50 dB (A weighted)
Wow and flutter	0.18 % (WRMS)
Fast forward and rewind time	Approx. 120 seconds with C-60 cassette tape

■ DISC SECTION

Discs played [8 cm or 12 cm]	
(1) CD-Audio (CD-DA)	
(2) CD-R/RW (CD-DA, MP3 formatted disc)	
(3) MP3	
Bit rate	
MP3	32 kbps - 320 kbps

Sampling frequency	
MP3	**32 kHz, 44.1 kHz, 48 kHz**
CD	**44.1 kHz**
Decoding	**16 bit linear**
Digital filter	**8 fs**
D/A converter	**MASH (1 bit DAC)**
Pickup	
Wavelength	**780 nm**
Beam Source	**Semiconductor laser**
Audio output (Disc)	
Number of channels	**2 (Stereo) (FL,FR)**
■ GENERAL	
Power Supply	**AC 110 V, 60 Hz**
Power consumption	**175 W**
Max (1% THD, AC 110V)	**336 W**
Power consumption in standby mode	**0.4 W**
Dimensions (W x H x D)	**250 x 330 x 341 mm**
Mass	**6.9 kg**
Operating temperature range	**+5 to +35°C**
Operating humidity range	**5 to 90% RH (no condensation)**
■ SYSTEM	
SC-AK230 (GT)	**Music center: SA-AK230 (GT)** **Speaker: SB-AK230 (GT)**

Notes:

1. **Specifications are subject to change without notice. Mass and dimensions are approximate.**
2. **Total harmonic distortion is measured by the digital spectrum analyzer.**

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Before Repair and Adjustment

Disconnect AC power, discharge Power Supply Capacitors C5820 and C5840 through a 10 Ω, 5W resistor to ground.

DO NOT SHORT-CIRCUIT DIRECTLY (with a screwdriver blade, for instance), as this may destroy solid state devices.

After repairs are completed, restore power gradually using a variac, to avoid overcurrent.

Current consumption at AC 100/110V, 50/60 Hz in NO SIGNAL mode (volume min at CD mode) should be ~500mA.

2. Protection Circuitry

The protection circuitry may have operated if either of the following conditions are noticed:

- No sound is heard when the power is turned on.

- Sound stops during a performance.

The function of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are "shorted", or if speaker systems with an impedance less than the indicated rated impedance of the amplifier are used.

If this occurs, follow the procedure outlines below:

1. **Turn off the power.**
2. **Determine the cause of the problem and correct it.**
3. **Turn on the power once again after one minute.**

Note :

When the protection circuitry functions, the unit will not operate unless the power is first turned off and then on again.

3. Prevention of Electro Static Discharge (ESD) to Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electro static discharge (ESD).

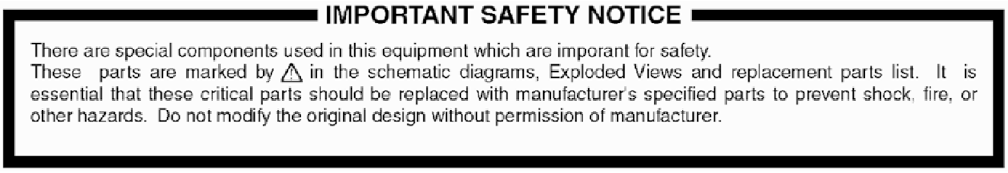
1. **Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, which should be removed for potential shock reasons prior to applying power to the unit under test.**
2. **After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminium foil, to prevent electrostatic charge build up or exposure of the assembly.**
3. **Use only a grounded-tip soldering iron to solder or unsolder ES devices.**
4. **Use only an anti-static solder remover device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge to damage ES devices.**
5. **Do not use freon-propelled chemicals. These can generate**

electrical charges sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminium foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution

   Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize body motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity (ESD) sufficient to damage an ES device).



IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are imporant for safety.
These parts are marked by ⚠ in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

4. Handling the Lead-free Solder

4.1. About lead free solder (PbF)

Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of soldering iron with temperature control, please set it to 700 ± 20°F (370 ± 10°C).
- Pb free solder will tend to splash when heated too high (about 1100°F/600°C).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

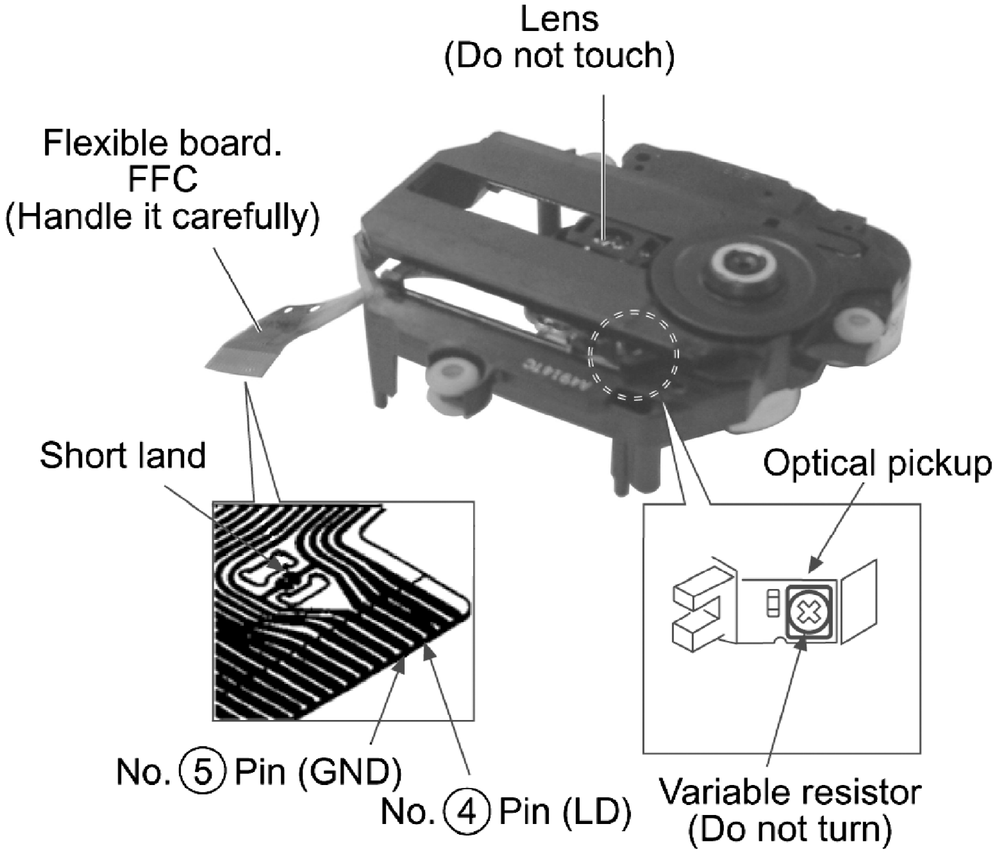
5. Handling Precautions For Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.

So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

- Handling of traverse deck (optical pickup)

1. **Do not subject the traverse deck (optical pickup) to static electricity as it is extremely sensitive to electrical shock.**
2. **To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FFC board).**
3. **Take care not to apply excessive stress to the flexible board (FFC board). When removing or connecting the short pin, finish the job in as short time as possible.**
4. **Do not turn the variable resistor (laser power adjustment). It has already been adjusted.**


Lens
(Do not touch)
Flexible board.
FFC
(Handle it carefully)
Short land
Optical pickup
No. ⑤ Pin (GND)
No. ④ Pin (LD)
Variable resistor
(Do not turn)

Grounding for electrostatic breakdown prevention

1. **Human body grounding**
   Use the anti-static wrist strap to discharge the static electricity

from your body.

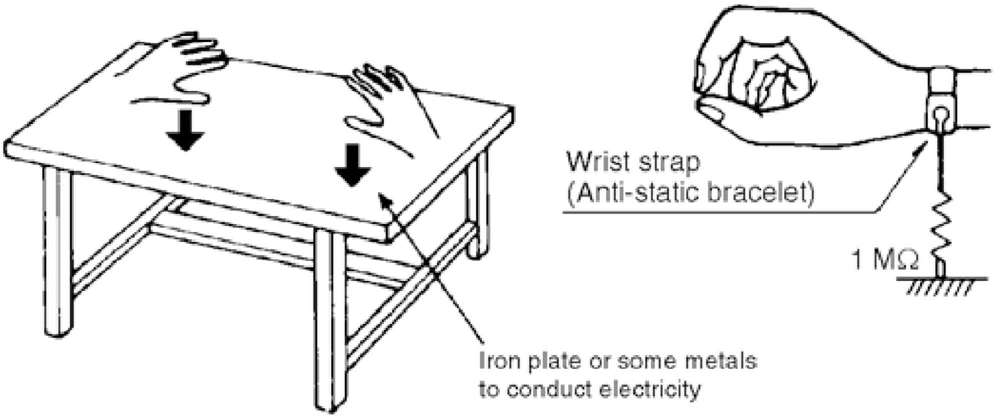
2. Work table grounding
   Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pickup) is place, and ground the sheet.

Caution :

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

Caution when replacing the Traverse Deck

The traverse deck has a short point shorted with solder to protect the laser diode against electrostatics breakdown. Be sure to remove the solder from the short point before making connections.



6. Precaution of Laser Diode

Caution :

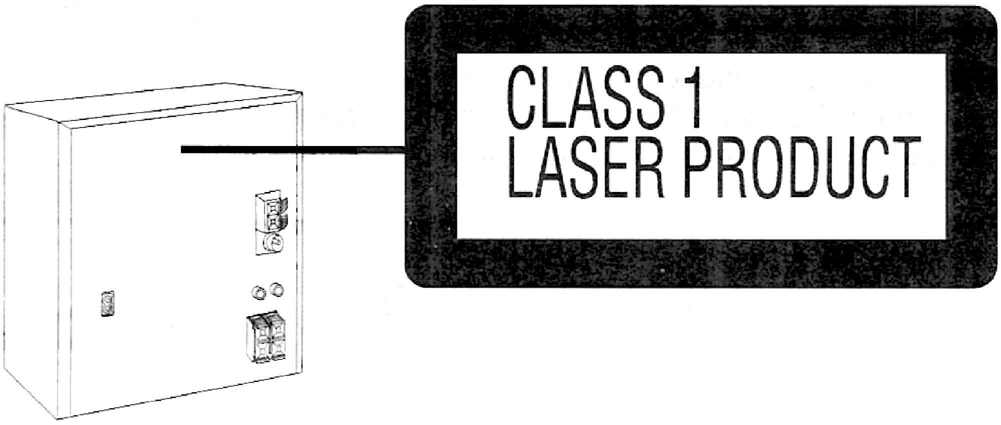
This product utilizes a laser diode with the unit turned "ON", invisible laser radiation is emitted from the pick up lens. / Wavelength : 780 nm / Maximum output radiation power from pick up : 100 μ W/VDE / Laser radiation from pick up unit is safety level, but be sure the followings:

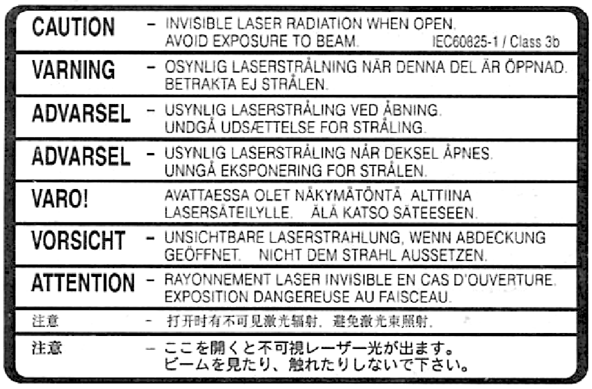
1. Do not disassemble the optical pick up unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pick up unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pick up lens for a long time.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN TH
SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

■ **Use of Caution Labels**

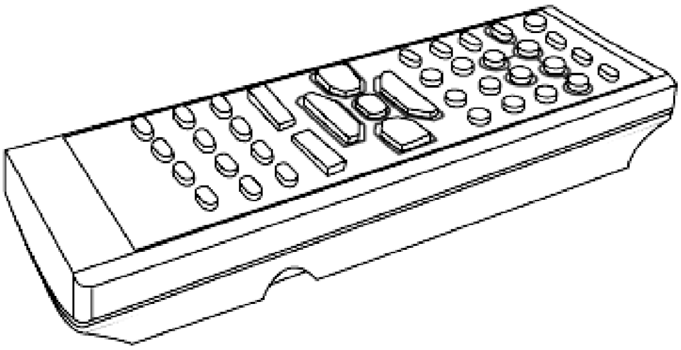




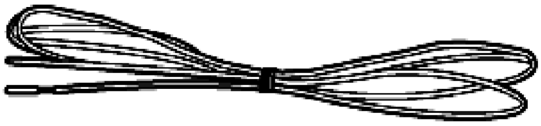
CAUTION	–	INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. IEC60825-1 / Class 3b
VARNING	–	OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRAKTA EJ STRÅLEN.
ADVARSEL	–	USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
ADVARSEL	–	USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
VARO!		AVATTAESSA OLET NÄKYMÄTÖNTÄ ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VORSICHT	–	UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
ATTENTION	–	RAYONNEMENT LASER INVISIBLE EN CAS D'OUVERTURE. EXPOSITION DANGEREUSE AU FAISCEAU.
注意	–	打开时有不可见激光辐射，避免激光束照射。
注意	–	ここを開くと不可視レーザー光が出ます。 ビームを見たり、触れたりしないで下さい。

7. Accessories

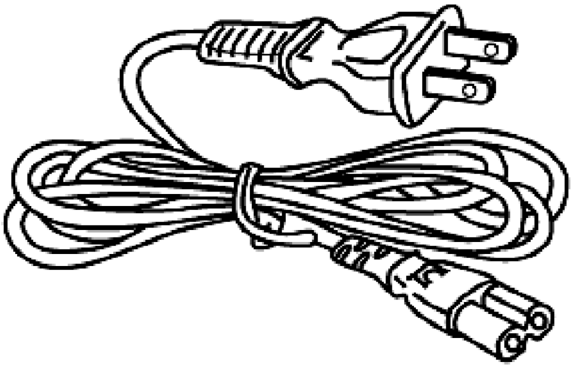
Remote Control



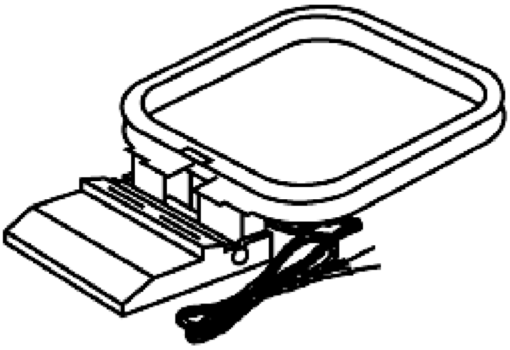
FM Antenna



AC Cord



AM Loop Antenna



8. Operation Procedures

9. Disassembly and Assembly of Main Component

“ATTENTION SERVICER”
Some chassis components may have sharp edges. Be careful when disassembling and servicing.

1. **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
2. **For reassembly after operation checks or replacement, reverse the respective procedures. / Special reassembly procedures are described only when required.**

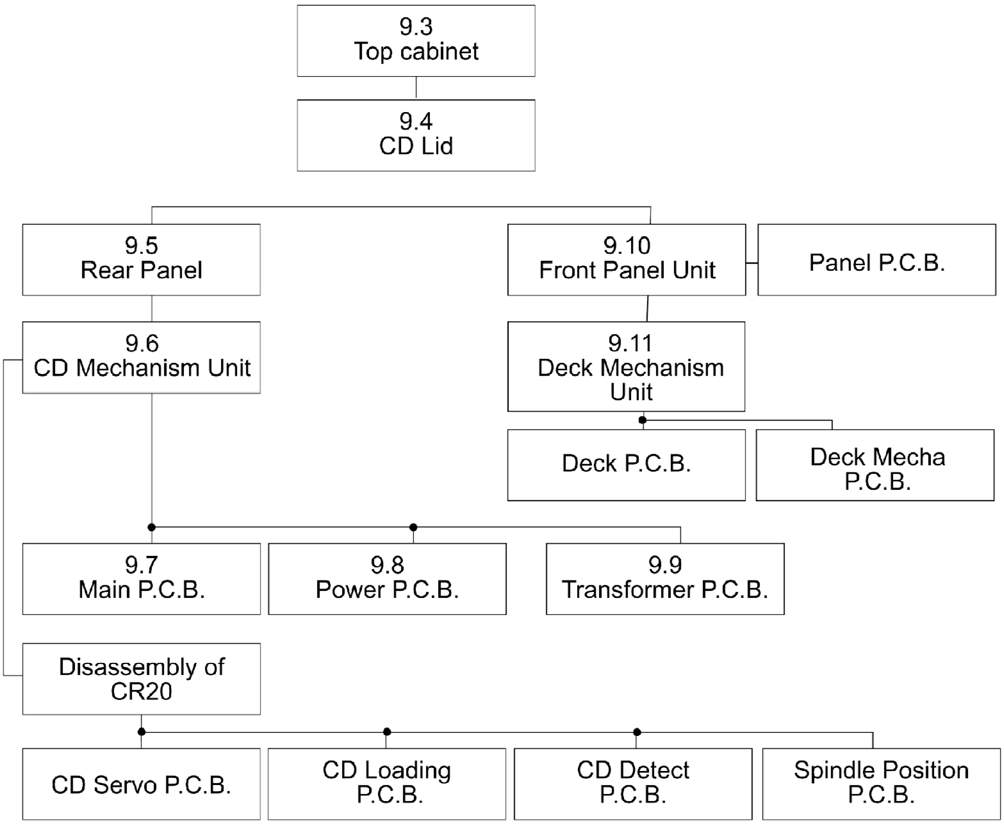
3. Select items from the following index when checks or replacement are required.

4. Refer to the Parts No. on the page of “Parts Location and Replacement Parts List” (Section 22), if necessary.

9.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

To assemble the unit, reverse the steps shown in the chart as below.


9.3
Top cabinet
9.4
CD Lid
9.5
Rear Panel
9.10
Front Panel Unit
Panel P.C.B.
9.6
CD Mechanism Unit
9.11
Deck Mechanism Unit
Deck P.C.B.
Deck Mecha P.C.B.
9.7
Main P.C.B.
9.8
Power P.C.B.
9.9
Transformer P.C.B.
Disassembly of CR20
CD Servo P.C.B.
CD Loading P.C.B.
CD Detect P.C.B.
Spindle Position P.C.B.

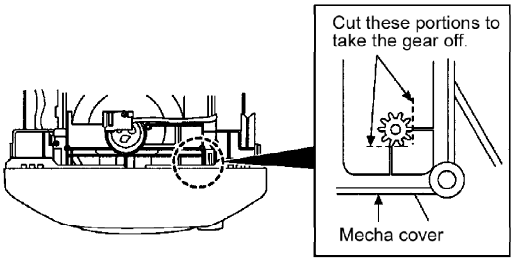
9.2. Gear for servicing (jig) Information

1. This unit has a gear which is used for checking items (Open/Close of disc tray, up/down operation of traverse unit by manually) when servicing.

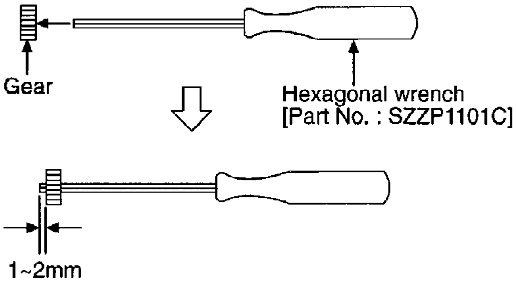
2. For preparation of gear (for servicing), perform the procedures as follows.

3. In case of re-servicing the same set, the “gear for servicing” may has been taken off because it has been used. The “gear for servicing” must be stored.

- Remove the gear provided with mecha cover as shown below.


Cut these portions to take the gear off.
Mecha cover

- Insert the hexagonal screwdriver (2mm) into the gear, and then project the tip of screwdriver for 1~ 2 mm in length.

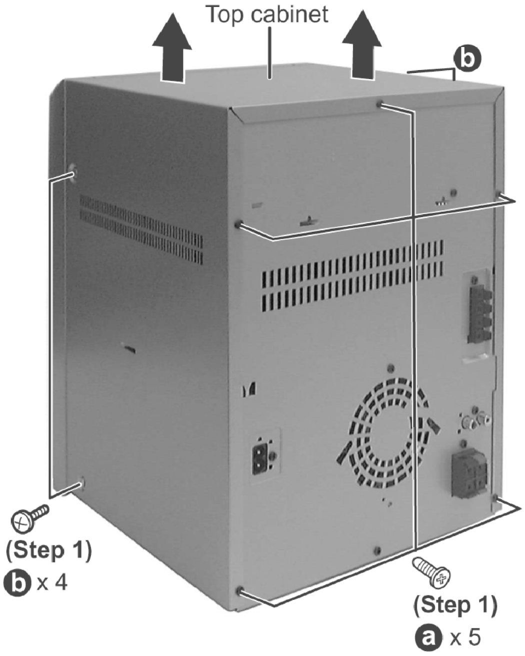

Gear
Hexagonal wrench
[Part No. : SZZP1101C]
1~2mm

(Preparation of gear as jig is completed.)

9.3. Disassembly of Top Cabinet

Step 1 Remove 2 screws at each side and 5 screws at rear panel.

Step 2 Lift up both sides of the top cabinet, push the top cabinet towards the rear and remove the top cabinet.


Top cabinet
b
(Step 1)
b x 4
(Step 1)
a x 5

9.4. Disassembly of CD Lid

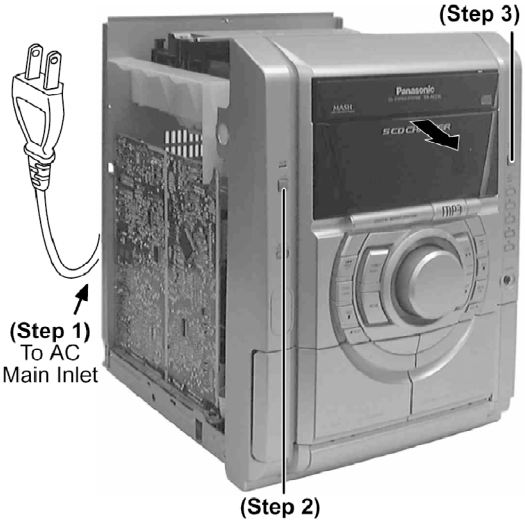
(The CD changer unit can be removed after the CD Lid is removed)

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

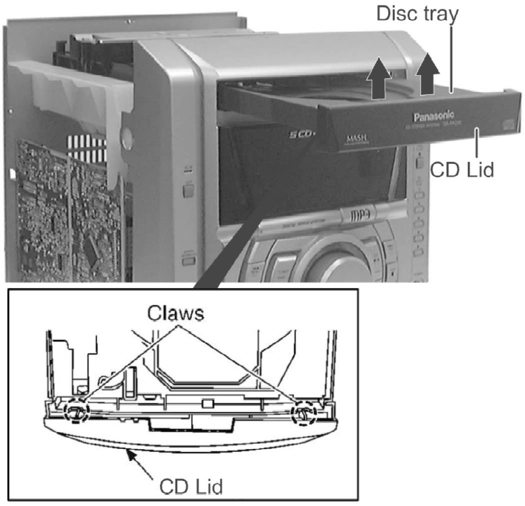
- Opening the disc tray automatically (Using Power Supply)

Step 1 Connect the AC power cord.

Step 2 Press the POWER button to power up the main unit.

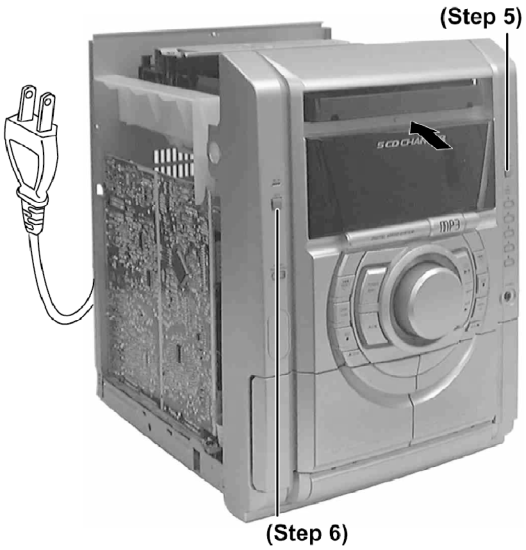

(Step 3)
(Step 1)
To AC
Main Inlet
(Step 2)

Step 3 Press the OPEN/CLOSE button, the disc tray will open automatically.


Disc tray
CD Lid
Claws
CD Lid

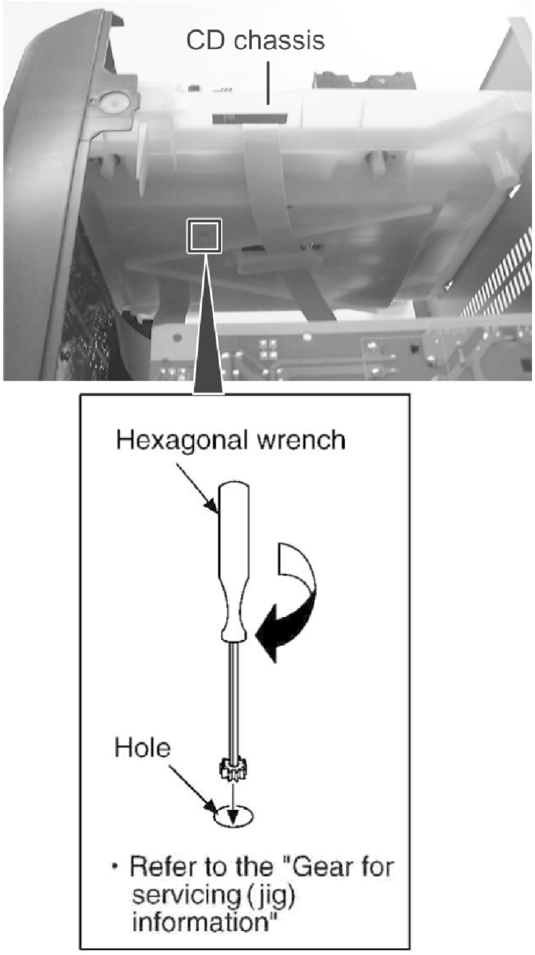
Step 4 Release the 2 claws, and then remove the CD Lid.

Step 5 Press the OPEN/CLOSE button, the disc tray will close.


(Step 5)
(Step 6)

Step 6 Press the POWER button to turn the power off.

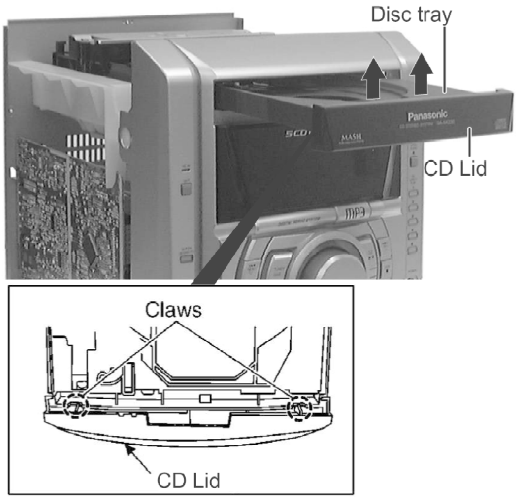
- [Opening the disc tray manually (Using service tools)]


CD chassis
Hexagonal wrench
Hole
• Refer to the "Gear for servicing (jig) information"

Step 1 Insert the gear tool into the hole on the underside of CD chassis and then rotate in the direction of arrow. The disc tray will be opened.

Panasonic
MASH
MP3

Step 2 Release the 2 claws, and then remove the CD lid cover.


Disc tray
Panasonic
MASH
CD Lid
MP3
Claws
CD Lid

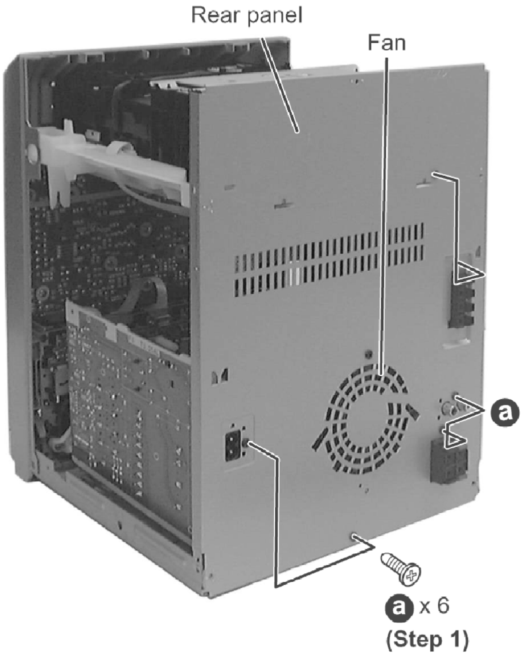
Step 3 Repeat Step 2 but rotate the gear tools in anti-clockwise direction.

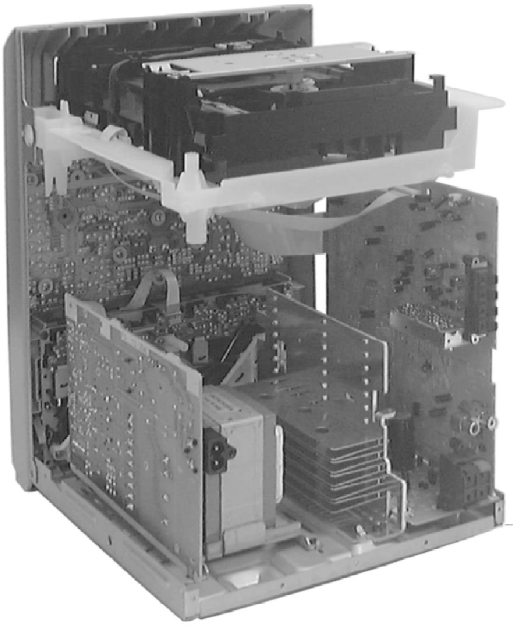
Step 4 The disc tray will be closed.

9.5. Disassembly of Rear Panel

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

Step 1 Remove 6 screws and disconnect wire CN2810 (Fan) at rear cabinet as shown.


Rear panel
Fan
a
a x 6
(Step 1)

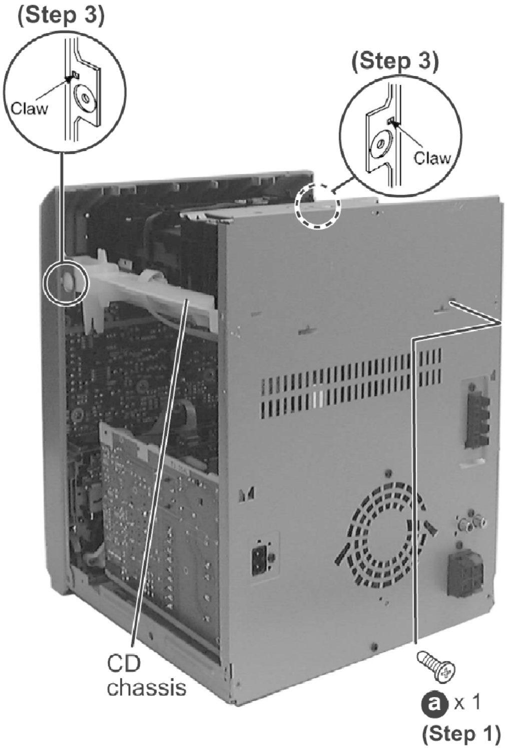


9.6. Disassembly of CD Mechanism Unit

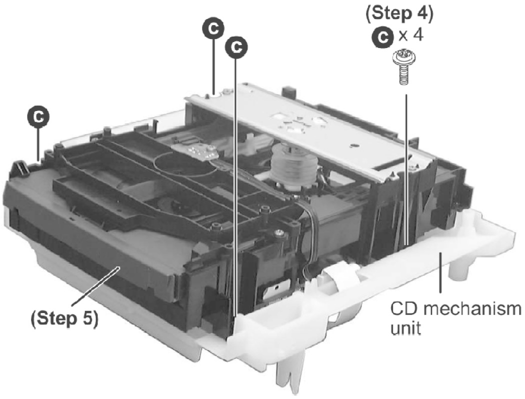
- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

Step 1 Remove one screw at rear panel.

Step 2 Detach the FFC wires (CN2801 & CN2805).


(Step 3)
Claw
(Step 3)
Claw
CD
chassis
a x 1
(Step 1)

Step 3 Release the claws of both ends, and then lift up the CD Mechanism Unit.

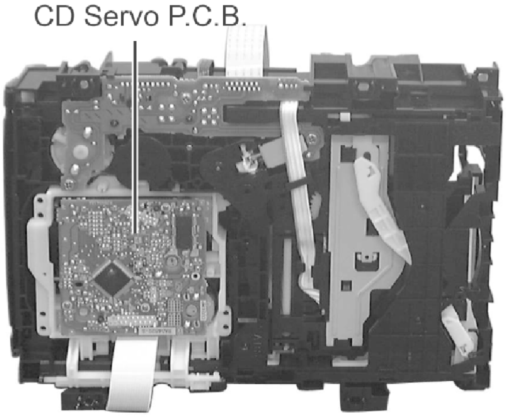


Step 4 Remove 4 screws.

Step 5 Remove the CD chassis.

Step 6 Lay the CD mechanism unit as shown.

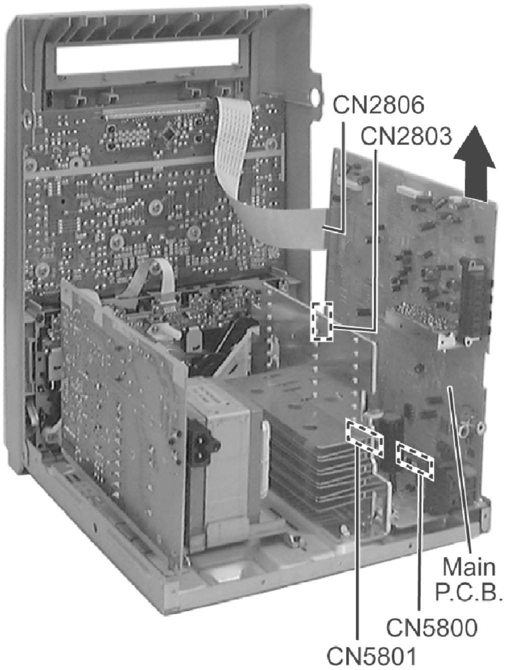
- For disassembly of CD mechanism unit, please refer to Section 9.12 of this manual.



9.7. Disassembly of Main P.C.B.

- **Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet**
- **Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid**
- **Follow the (Step 1) of Item 9.5 - Disassembly of Rear Panel**
- **Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit**

Step 1 Disconnect FFC wires CN2803 & CN2806 from Main P.C.B.

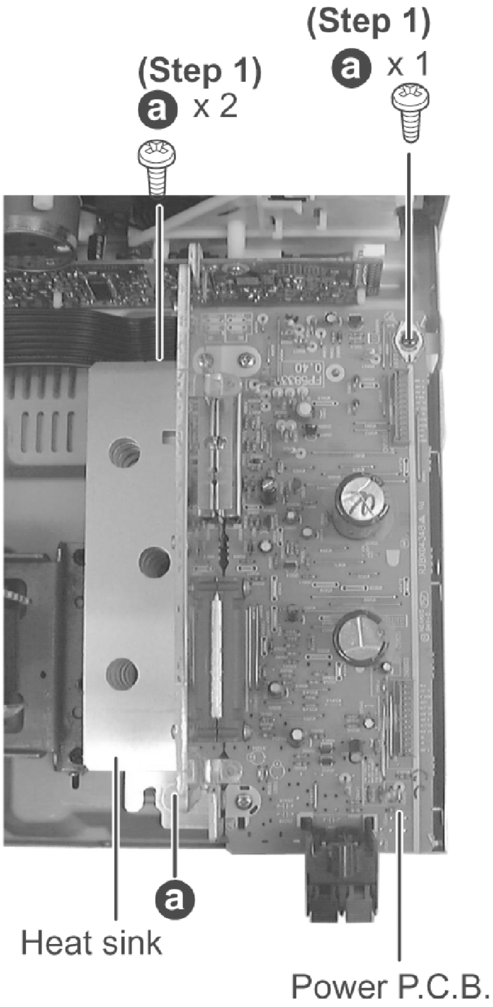


Step 2 Lift up Main P.C.B. by disconnecting connectors CN5800 & CN5801 as arrow shown above.

9.8. Disassembly of Power P.C.B.

- **Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet**
- **Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid**
- **Follow the (Step 1) of Item 9.5 - Disassembly of Rear Panel**
- **Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit**
- **Follow the (Step 1) - (Step 2) of Item 9.7 - Disassembly of Main P.C.B.**

Step 1 Remove the 2 screws fixed at heat sink and 1 screw fixed at Power P.C.B..

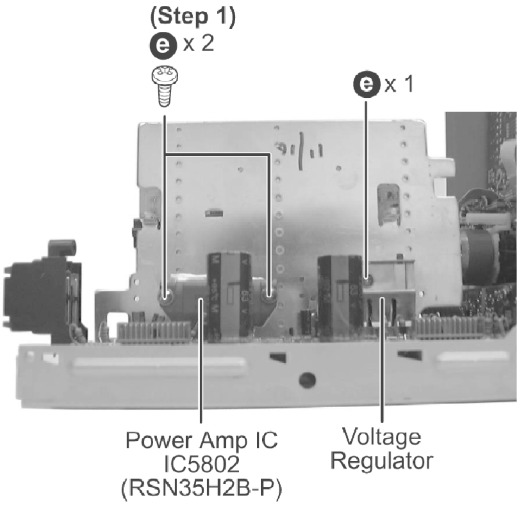

(Step 1)
a x 2
(Step 1)
a x 1
a
Heat sink
Power P.C.B.

Note:

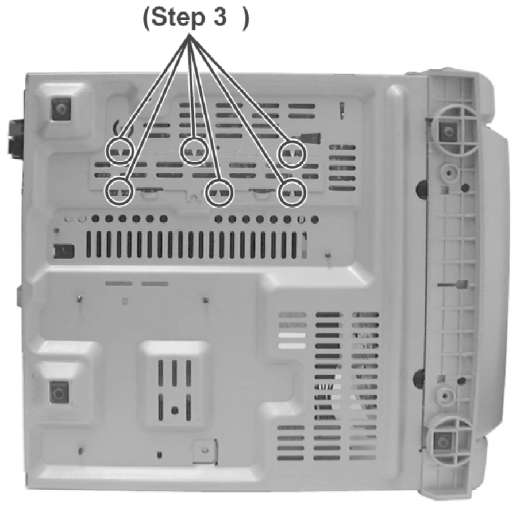
Insulate the Power P.C.B. with insulation material to avoid short circuit.

- Replacement of the Power Amplifier IC/ Voltage Regulator

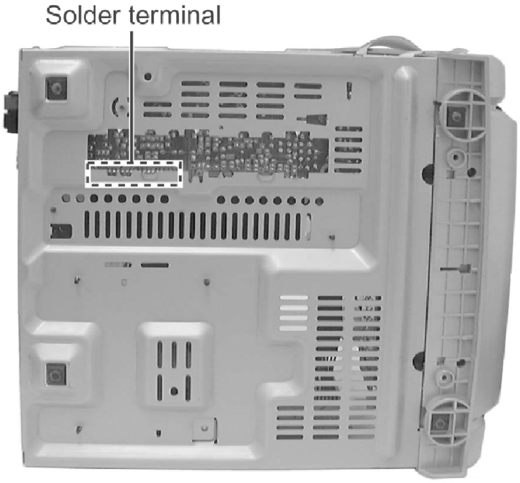
Step 1 Remove 2 screws fixed to the Power Amplifier IC and 1 screw to Voltage Regulator.


(Step 1)
e x 2
e x 1
Power Amp IC
IC5802
(RSN35H2B-P)
Voltage
Regulator

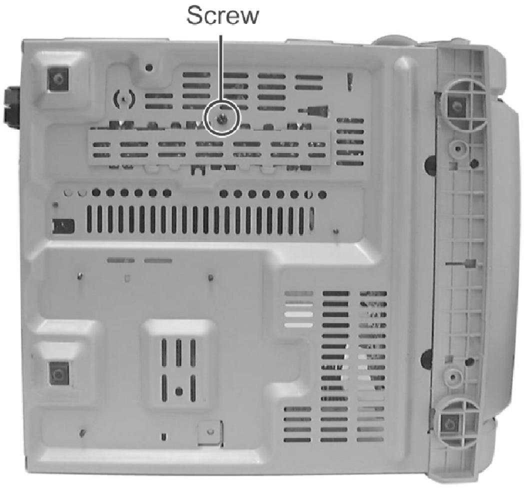
Step 2 Break the joint with a metal cutter as shown below.



Step 3 Unsolder the terminals of Power Amp IC, transistor and replace the components.



Step 4 Fix back the cut portion with a screw as shown.



9.9. Disassembly of Transformer P.C.B.

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top

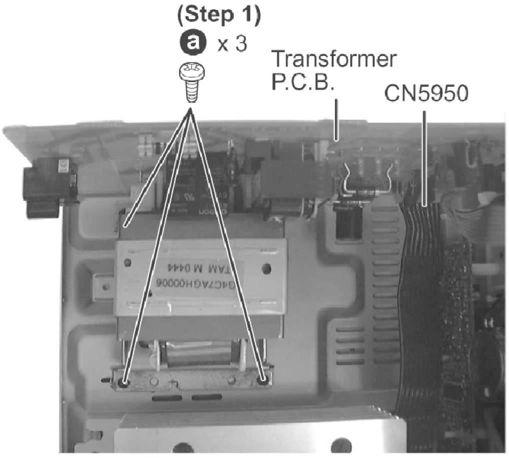
Cabinet

- Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid

- Follow the (Step 1) of Item 9.5 - Disassembly of Rear Panel

- Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit

Step 1 Remove 3 screws, disconnect connector CN5950.



9.10. Disassembly of Front Panel Unit

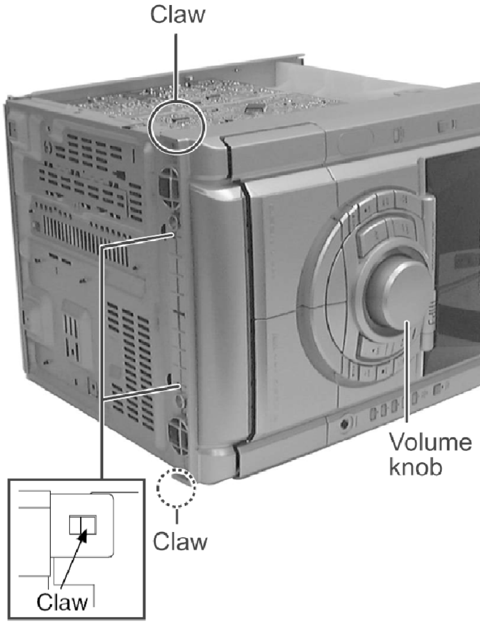
- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid

- Follow the (Step 1) of Item 9.5 - Disassembly of Rear Panel

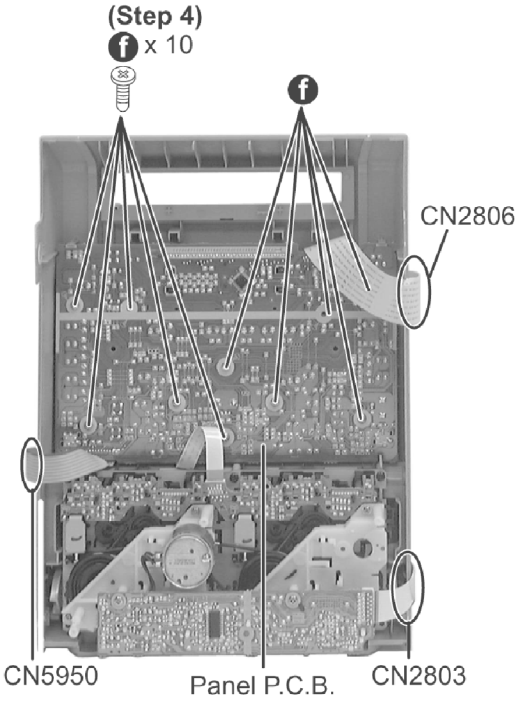
- Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit

Step 1 Lay the unit as shown below.


Claw
Volume knob
Claw
Claw

Step 2 Release 2 claws at bottom and 2 claws each side, draw the front panel ass'y forward.
Step 3 Remove volume knob.

- Disassembly of Panel P.C.B.


(Step 4)
f x 10
f
CN2806
CN5950
Panel P.C.B.
CN2803

Step 4 Remove 10 screws.
Step 5 Disconnect connectors (CN2806, CN2803 and CN5950).

9.11. Disassembly of Deck Mechanism Unit

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid

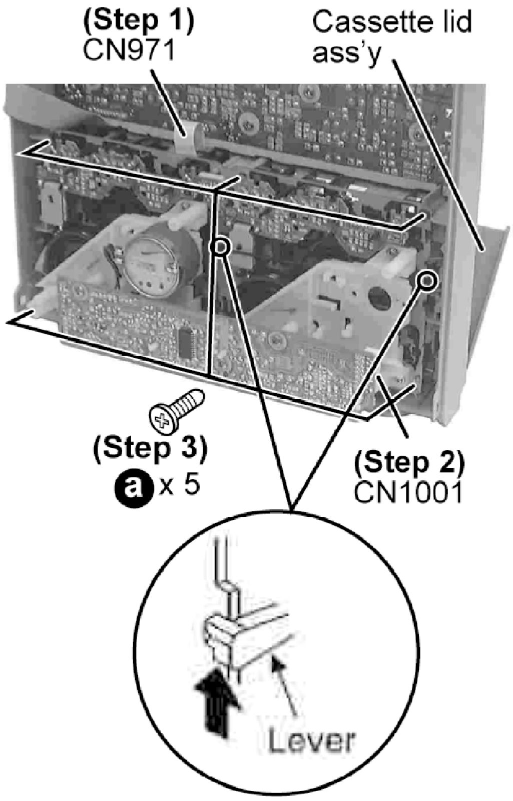
- Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit

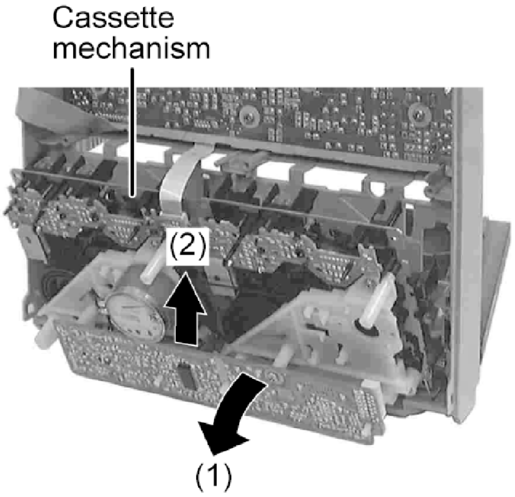
- Follow the (Step 1) - (Step 3) of Item 9.10 - Disassembly of Front Panel Unit

Step 1 Detach FFC wire (CN971).

Step 2 Disconnect FFC flat cable from the connector (CN1001).

Step 3 Remove the 5 screws.


(Step 1)
CN971
Cassette lid ass'y
(Step 3)
a x 5
(Step 2)
CN1001
Lever

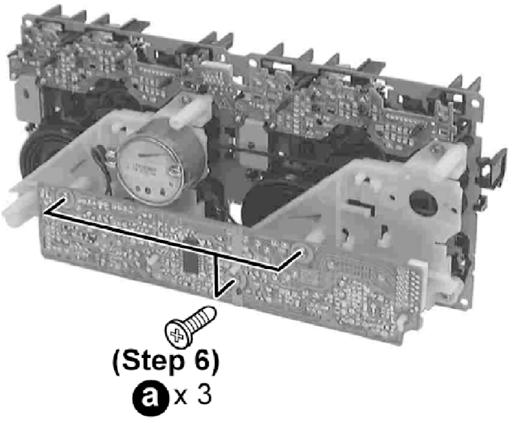

Cassette mechanism
(2)
(1)

Step 4 Push the lever upward, and then open the cassette lid ass'y (For DECK1 and DECK2).

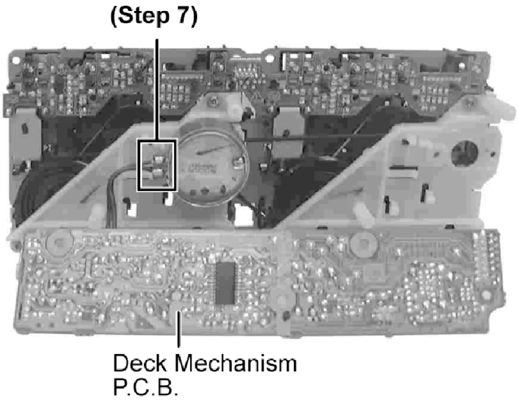
Step 5 Tilt the cassette mechanism unit in the direction of arrow (1), and then remove it in the direction of arrow (2).

- For replacement of Deck Mechanism P.C.B.

Step 6 Remove 3 screws.



Step 7 Unsolder the motor terminals.



Step 8 Remove Deck Mechanism P.C.B.

9.12. CD Mechanism Main Component Replacement Procedures

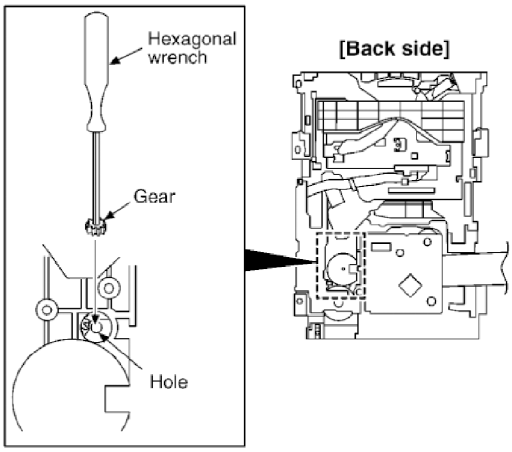
- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

- Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid

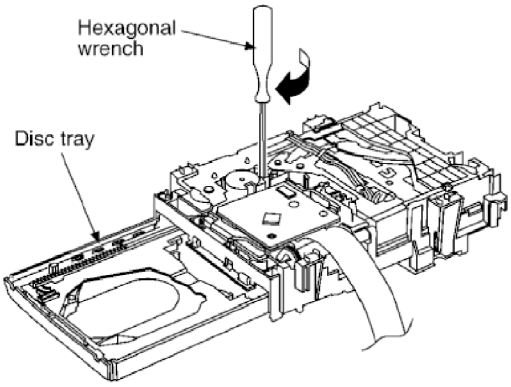
- Follow the (Step 1) - (Step 6) of Item 9.6 - Disassembly of CD Mechanism Unit

9.12.1. Replacement of the Traverse Deck

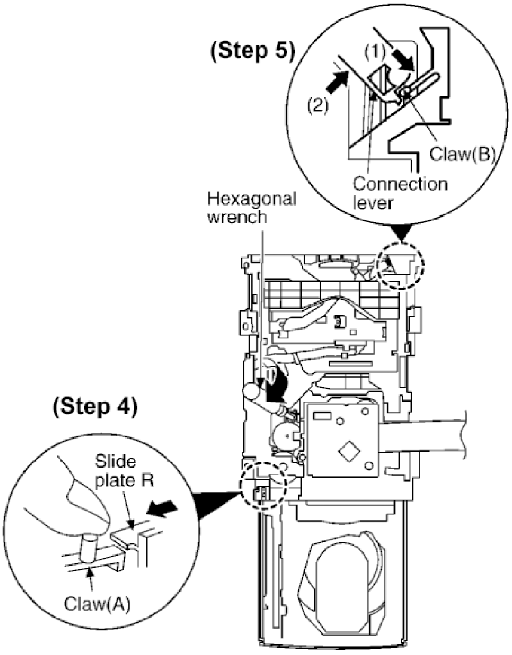
Step 1 Remove the CD changer unit.


Hexagonal wrench
Gear
Hole
[Back side]

Step 2 Insert the gear with hexagonal wrench into the hole.

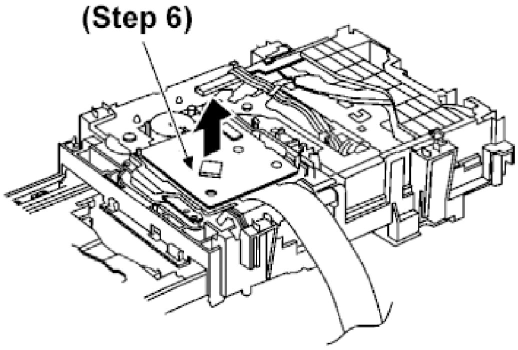

Hexagonal wrench
Disc tray

Step 3 Rotate the hexagonal wrench in the direction of arrow (clockwise), and then open the disc tray fully.

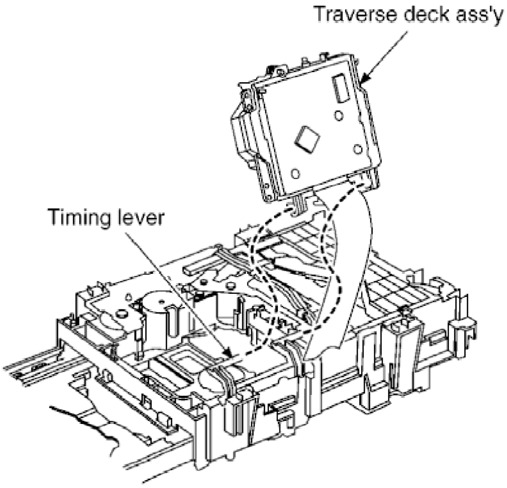

(Step 5)
(1)
(2)
Claw(B)
Connection lever
Hexagonal wrench
(Step 4)
Slide plate R
Claw(A)

Step 4 With pressing the claw (A), rotate the hexagonal wrench clockwise. (The slide plate R moves for a little amount.)

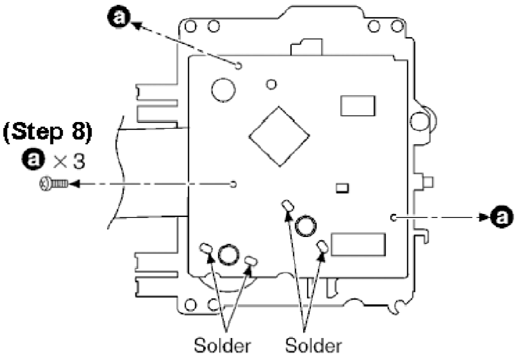
Step 5 Pressing the claw (B) in the direction of arrow (1), the connection lever moves in the direction of arrow (2).



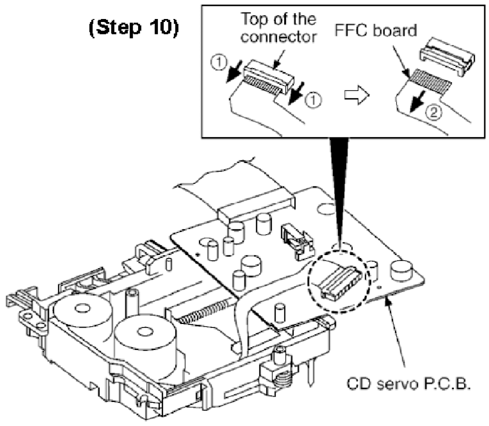
Step 6 Lift up the traverse deck ass'y.


Traverse deck ass'y
Timing lever

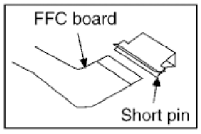
Step 7 Remove the traverse deck ass'y from the timing lever.
Caution:
When removing or inserting the traverse deck avoid touching the OPU lens and pressing onto the turntable.


a
(Step 8)
a × 3
a
Solder
Solder

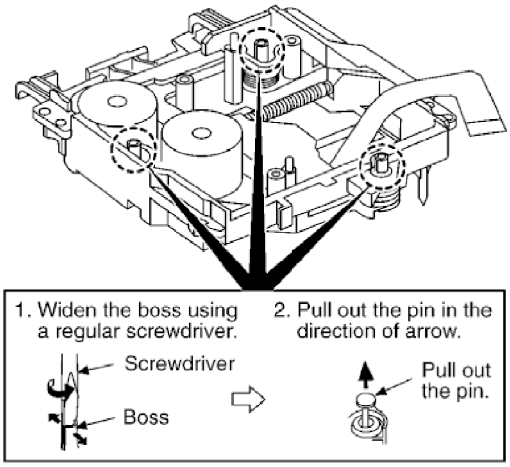
Step 8 Remove 3 screws.
Step 9 Unsolder the motor terminals (4 points).


(Step 10)
Top of the connector
FFC board
①
①
②
CD servo P.C.B.

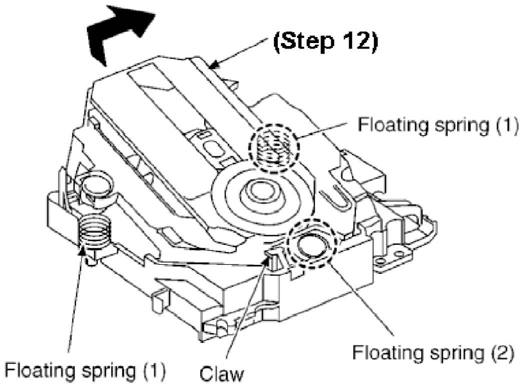
Caution:
Insert a short pin into the traverse unit FFC board.
(Refer to "**Handling Precautions for Traverse Deck**".)


FFC board
Short pin

Step 10 Remove the FFC board from the connector, and then remove the CD Servo P.C.B.


1. Widen the boss using a regular screwdriver.
Screwdriver
Boss
2. Pull out the pin in the direction of arrow.
Pull out the pin.

Step 11 Remove the pin.


(Step 12)
Floating spring (1)
Floating spring (1)
Claw
Floating spring (2)

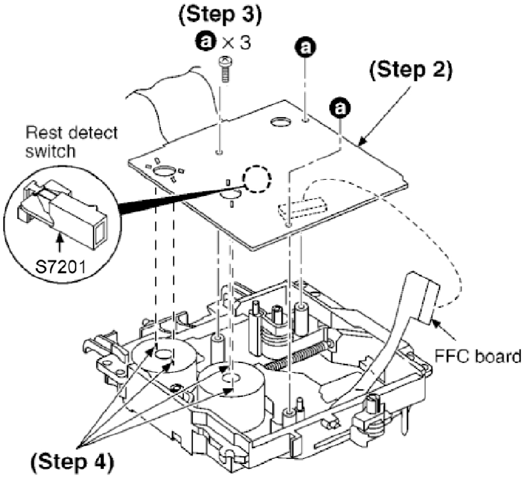
Step 12 Release the claw, and then remove the traverse deck ass'y.

Note:

Be careful not to lose the 3 floating spring because those will also be removed on removal of the traverse deck ass'y.

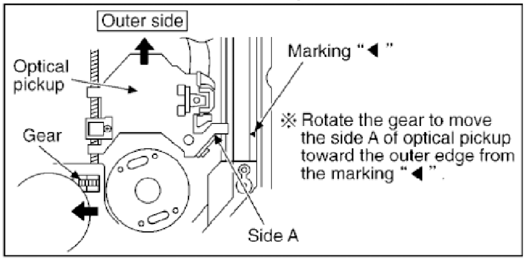
- Installation of the CD Servo P.C.B. after replacement

Step 1 Connect the FFC board.
Step 2 Install the CD servo P.C.B. in the traverse deck ass'y.
Step 3 Remove 3 screws.
Step 4 Solder.


(Step 3)
ⓐ × 3
ⓐ
(Step 2)
ⓐ
Rest detect switch
S7201
FFC board
(Step 4)

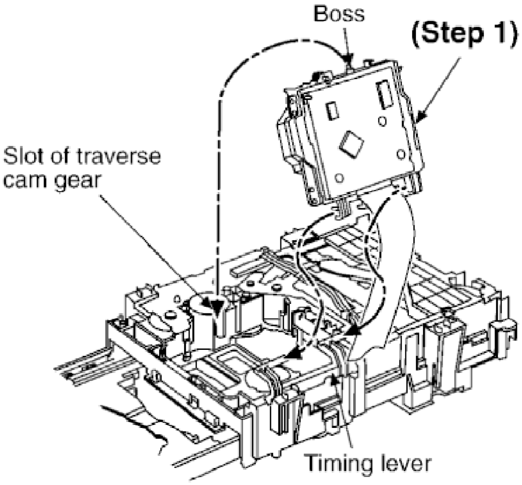
- Note for installation of the CD servo P.C.B.

Before installing the CD servo P.C.B., move the optical pickup toward the outer edge from the mark "◀".
[Otherwise, the rest detect switch (S7201) mounted on the CD servo P.C.B. may be damaged.]

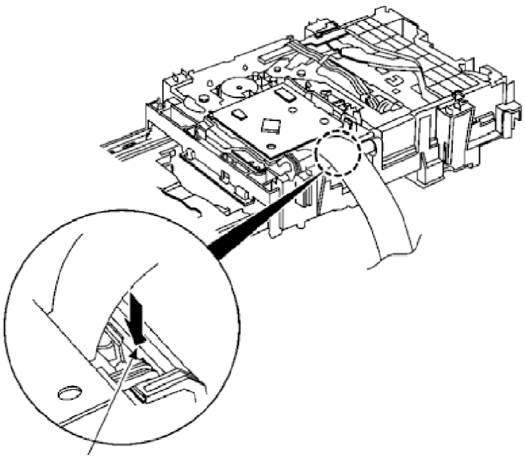

Outer side
Optical pickup
Marking "◀"
Gear
Side A

※ Rotate the gear to move the side A of optical pickup toward the outer edge from the marking "◀".

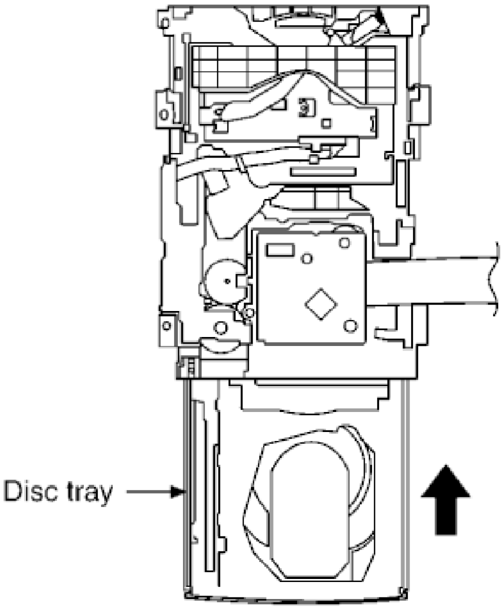
- Installation for traverse deck ass'y


Boss
(Step 1)
Slot of traverse cam gear
Timing lever

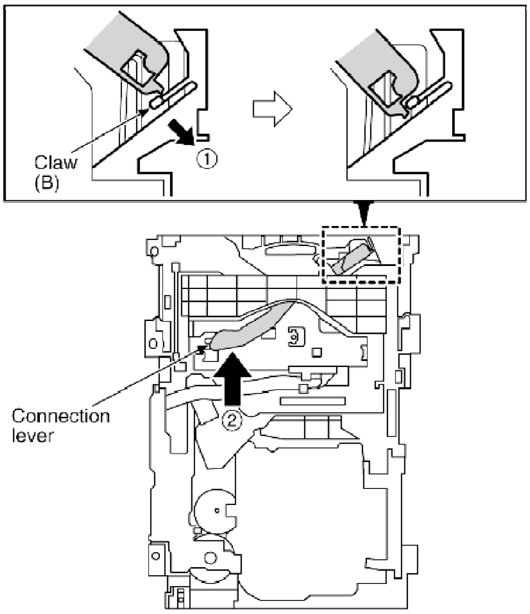
Step 1 Install the traverse deck ass'y to the timing lever.
Step 2 Align the boss of traverse deck ass'y with the slot of traverse cam gear.


Claw of timing lever

Step 3 Force the claw of timing lever.



Step 4 Force the disc tray fully.

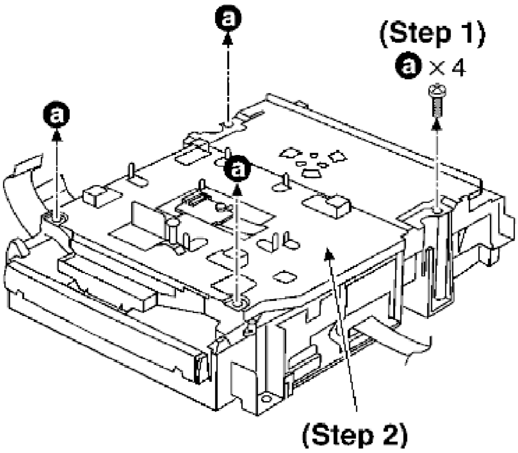

Claw
(B)
①
Connection
lever
②

Step 5 With pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

9.12.2. Replacement for the Disc Tray

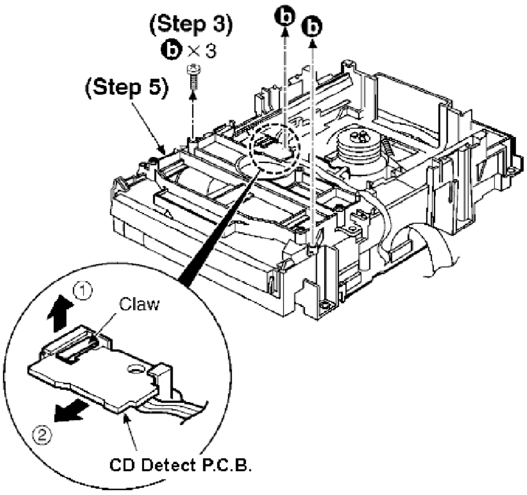
Step 1 Remove 4 screws.

Step 2 Remove the upper plate.

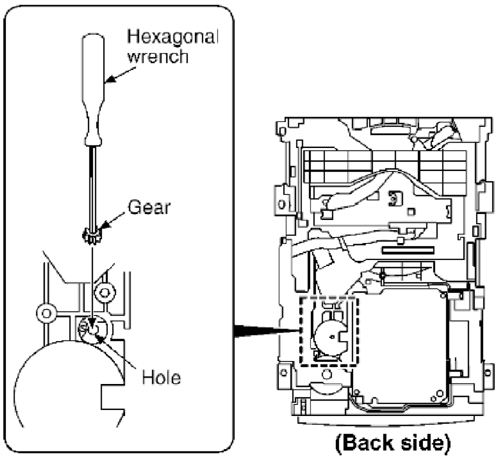

a
a
a
(Step 1)
a × 4
(Step 2)

Step 3 Remove 3 screws.

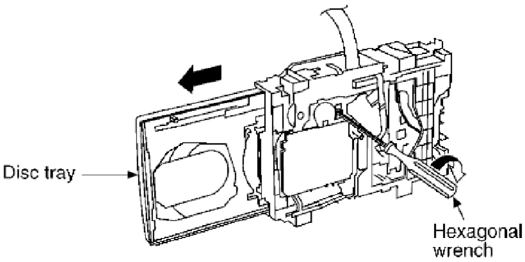
Step 4 With lifting the claw in the direction of (1), draw the CD Detect P.C.B. in the direction of arrow (2).


(Step 3)
ⓑ×3
ⓑ ⓑ
(Step 5)
①
Claw
②
CD Detect P.C.B.

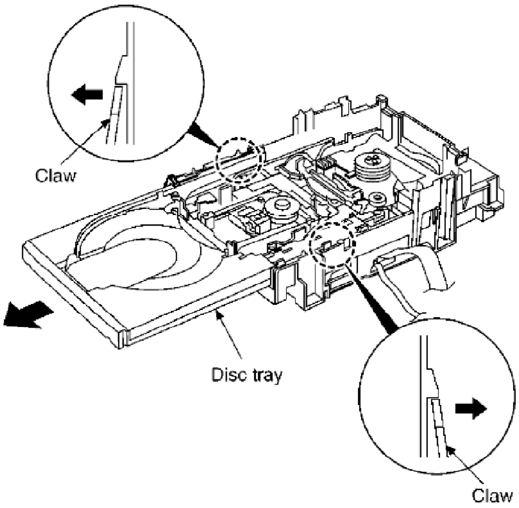
Step 5 Remove the mechanism cover.


Hexagonal wrench
Gear
Hole
(Back side)

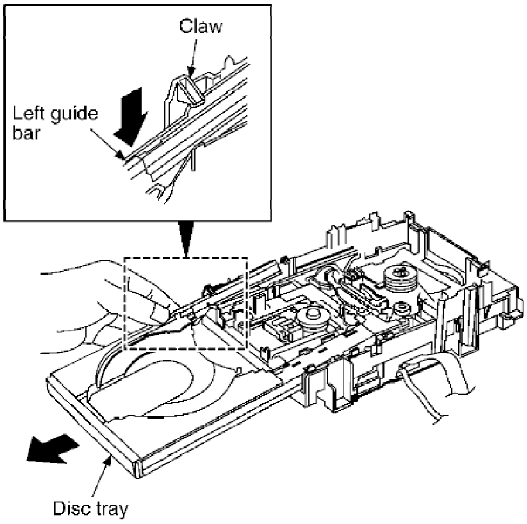
Step 6 Insert the gear with hexagonal wrench into the hole.


Disc tray
Hexagonal wrench

Step 7 Rotate the hexagonal wrench in the direction of arrow, and then open the disc tray fully.

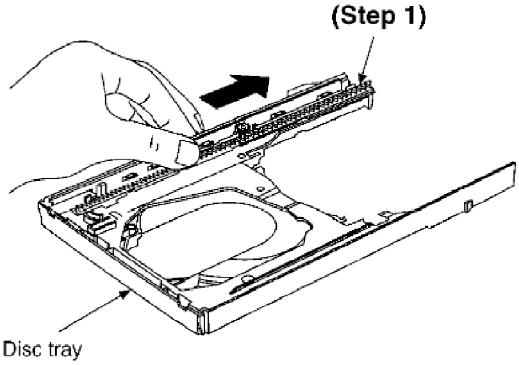

Claw
Disc tray
Claw

Step 8 Release the both claws, and then draw the disc tray.

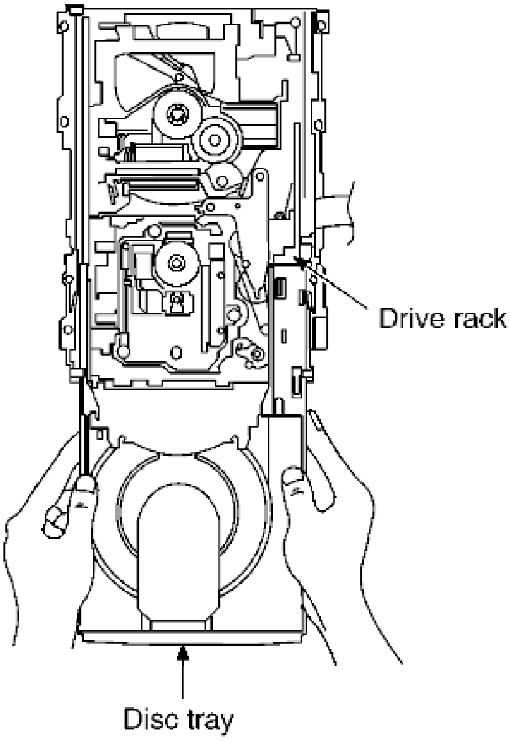

Claw
Left guide bar
Disc tray

Step 9 With forcing the left guide bar manually because the left guide bar interfers with claw, draw the disc tray.

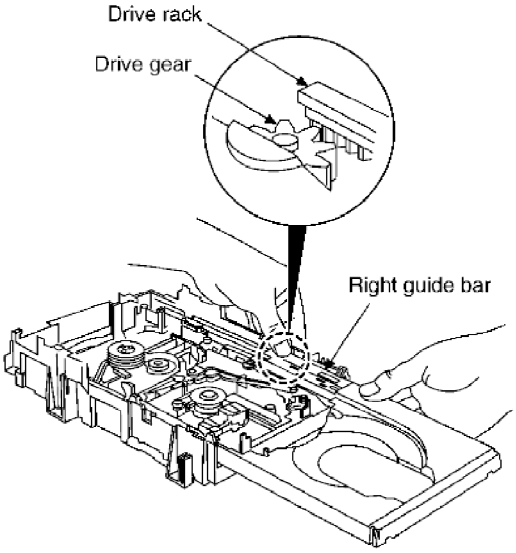
[Installation of the disc tray after replacement]


(Step 1)
Disc tray

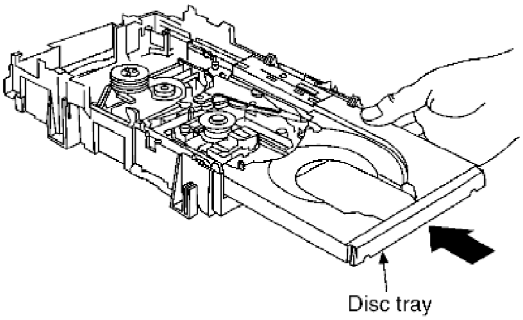
Step 1 Slide the drive rack fully in the direction of arrow.


Drive rack
Disc tray

Step 2 Holding the drive rack not to move, install the disc tray.
Step 3 Align the drive rack with the drive gear.


Drive rack
Drive gear
Right guide bar

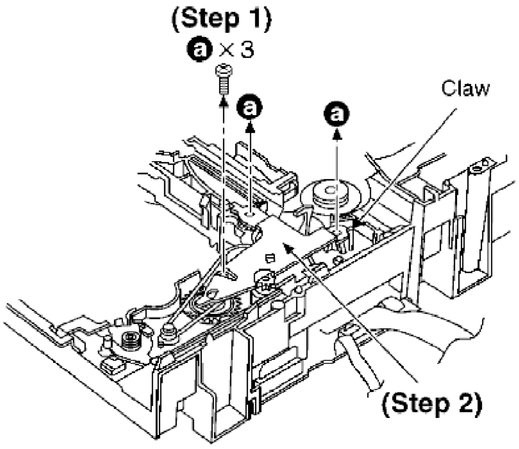
NOTE:
Force the right guide bar of tray base manually not to move upwards.



Step 4 Holding the disc tray manually, push the disc tray in the direction of the arrow.

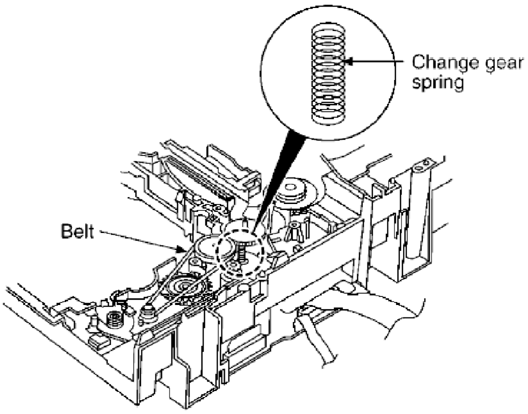
9.12.3. Disassembly and reassembly for mechanism base drive unit

Step 1 Remove 3 screws.


(Step 1)
ⓐ × 3
ⓐ
ⓐ
Claw
(Step 2)

Step 2 Release the claw, and then remove the gear holder.

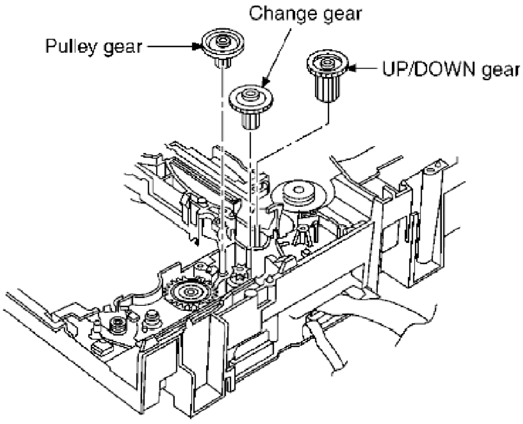
Step 3 Remove the belt and change gear spring.


Change gear spring
Belt

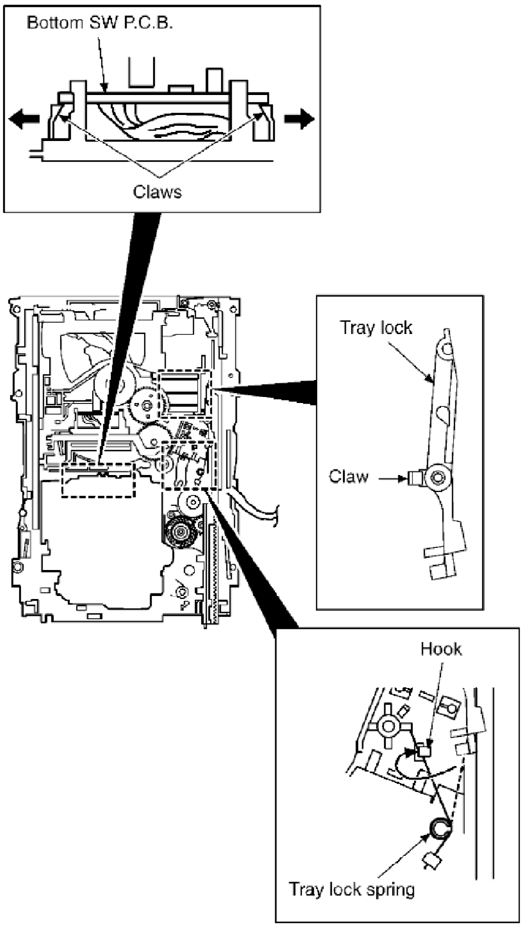
NOTE:

Take care not to lose the change gear spring.

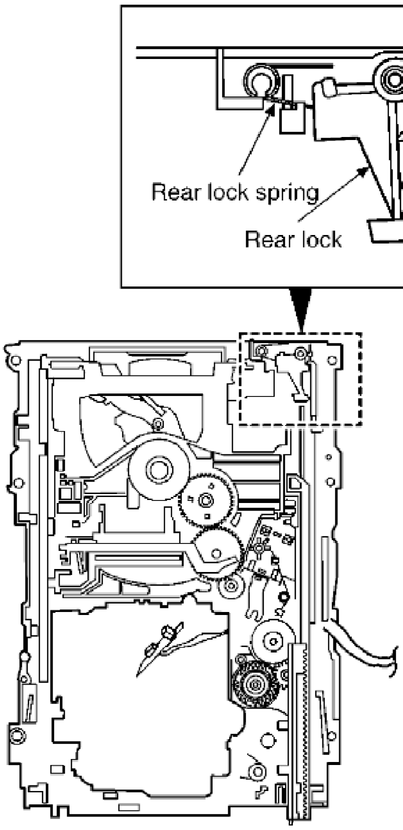
Step 4 Remove the pulley gear, change gear and UP/DOWN gear.


Change gear
Pulley gear
UP/DOWN gear

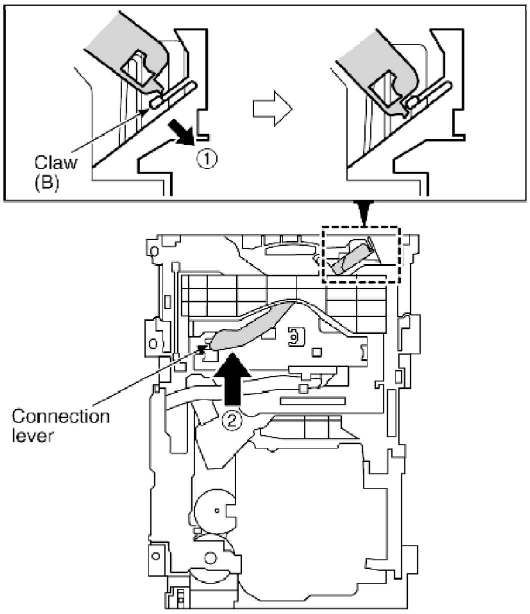
Step 5 Release the 2 claws, and then remove the bottom SW P.C.B..


Bottom SW P.C.B.
Claws
Tray lock
Claw
Hook
Tray lock spring

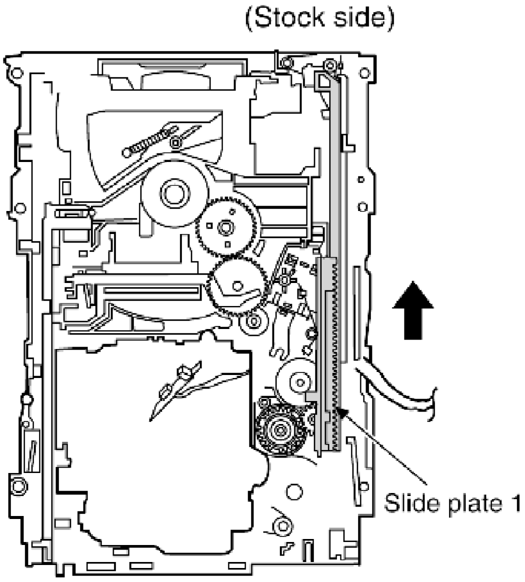
Step 6 Install the tray lock spring to hook temporary.
Step 7 Release the claw, and then remove the tray lock.
Step 8 Release the claw, and then remove the rear lock.


Claw
Rear lock spring
Rear lock

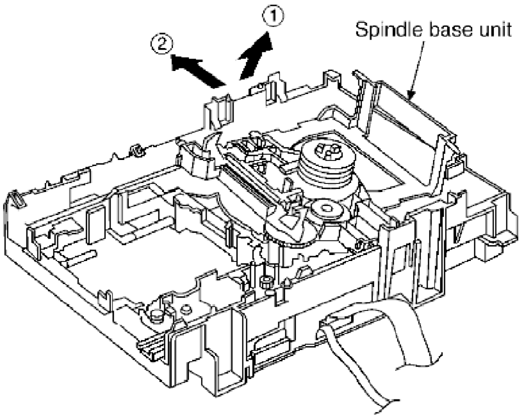
Step 9 Pressing the claw (B) in the direction of arrow (1), force the connection lever in the direction of arrow (2).

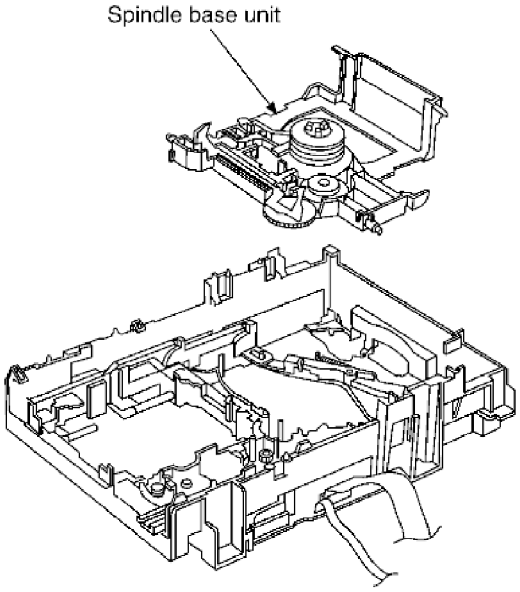

Claw
(B)
①
Connection
lever
②

Step 10 Move the slide plate 1 to the end of stock side.

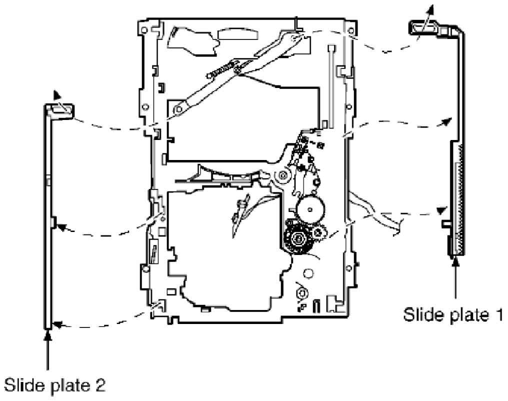

(Stock side)
Slide plate 1

Step 11 Lift up the left end of spindle base unit in the direction of arrow (1), and then remove the unit in the direction of arrow (2).

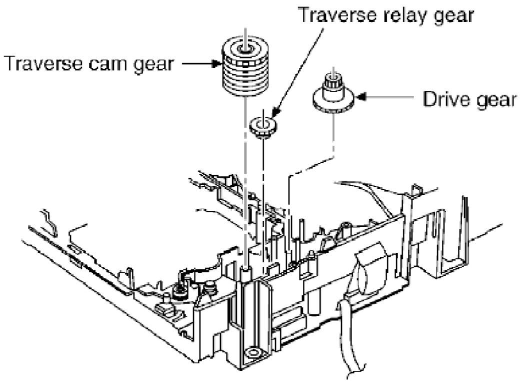

①
②
Spindle base unit


Spindle base unit

Step 12 Remove slide plate 1 and slide plate 2.

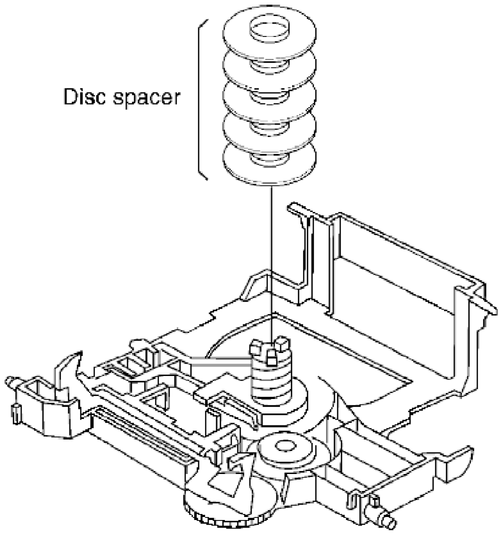

Slide plate 1
Slide plate 2

Step 13 Remove the traverse relay gear, traverse cam gear and drive gear.

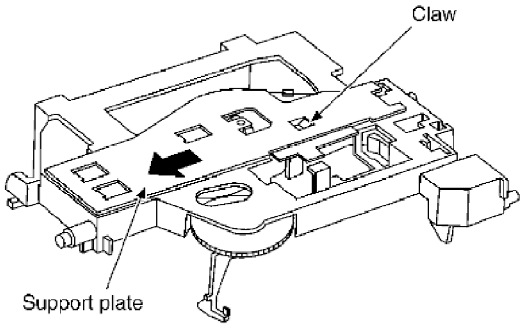

Traverse relay gear
Traverse cam gear
Drive gear

[Dissassembly/reassembly for the spindle base unit]

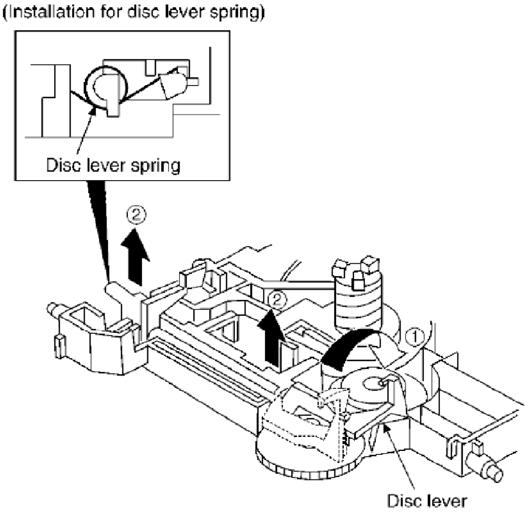
Step 1 Draw the 5 disc spacers.


Disc spacer

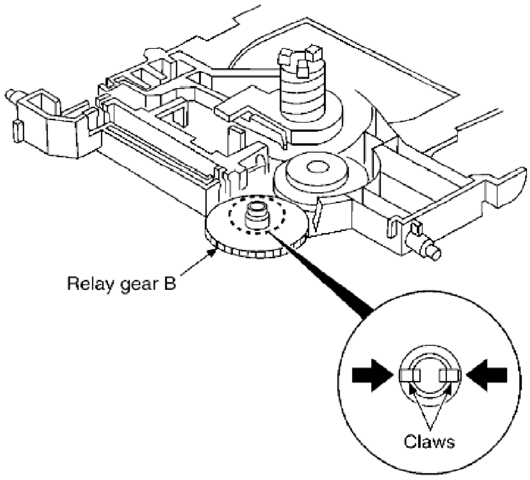
Step 2 Pushing the claw, slide the support plate in the direction of arrow, and then remove it.


Claw
Support plate

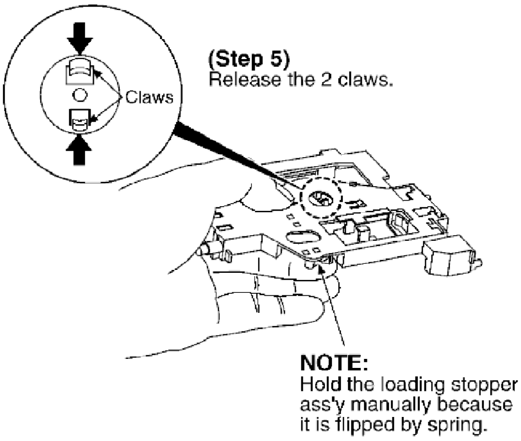
Step 3 Rotate the disc lever in the direction of arrow (1), draw the disc lever.


(Installation for disc lever spring)
Disc lever spring
②
②
①
Disc lever

NOTE:
Take care not to lose the disc lever spring.

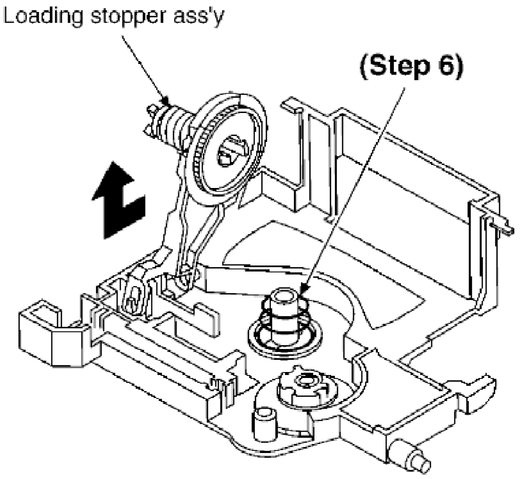

Relay gear B
Claws

Step 4 Release the 2 claws, and then draw the relay gear B.
Step 5 Release the 2 claws as shown below.


(Step 5)
Release the 2 claws.
Claws
NOTE:
Hold the loading stopper ass'y manually because it is flipped by spring.

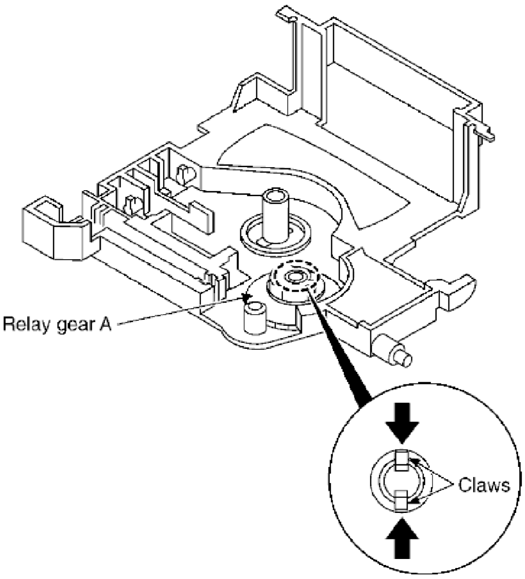
NOTE:

Hold the loading stopper ass’y manually bacause it is flipped by spring.


Loading stopper ass'y
(Step 6)

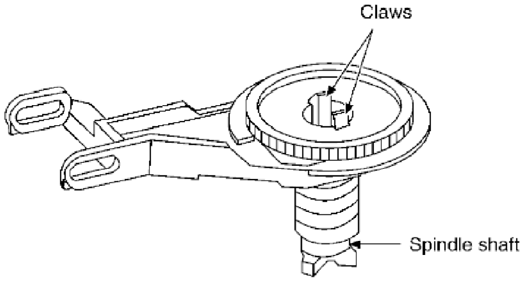
Step 6 Remove the cushion spring.

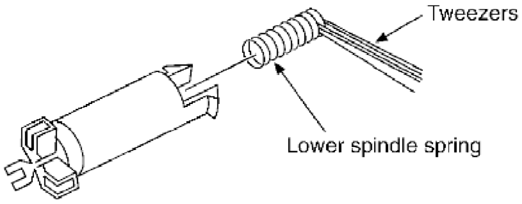
Step 7 Remove the loading stopper ass’y in the direction of arrow.


Relay gear A
Claws

Step 8 Release the 2 claws, and then remove the relay gear A.

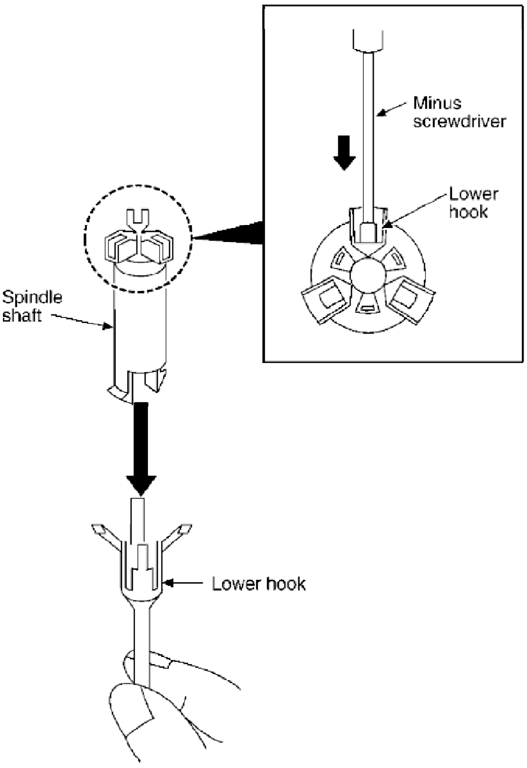
Step 9 Release the 2 claws, and then remove the spindle shaft.


Claws
Spindle shaft

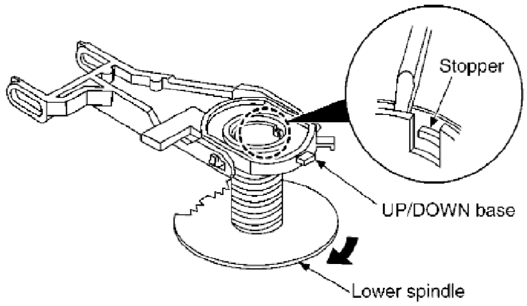

Tweezers
Lower spindle spring

Step 10 Remove the lower spindle spring with tweezers.

Step 11 Force the lower hook with thin tip of minus screwdriver.

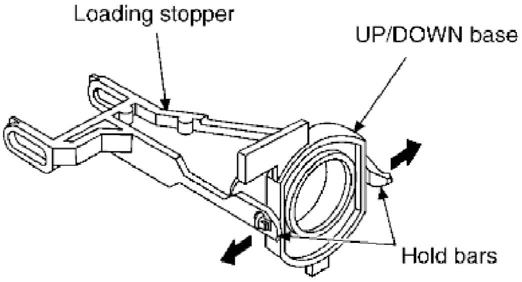

Minus
screwdriver
Lower
hook
Spindle
shaft
Lower hook

Step 12 Squeeze the shaft of lower hook, and then draw it.


Stopper
UP/DOWN base
Lower spindle

Step 13 Rotate the lower spindle in the direction of arrow until the lower spindle interferes with stopper.

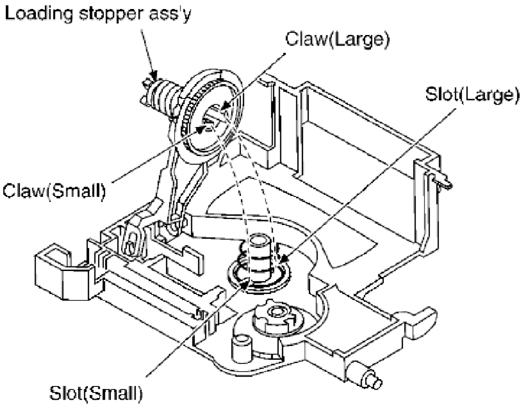
Step 14 Insert the thin tip of minus screwdriver between the lower spindle and UP/DOWN base, and then slacken the lower spindle to release the stopper. Then, rotate the lower spindle and remove it.


Loading stopper
UP/DOWN base
Hold bars

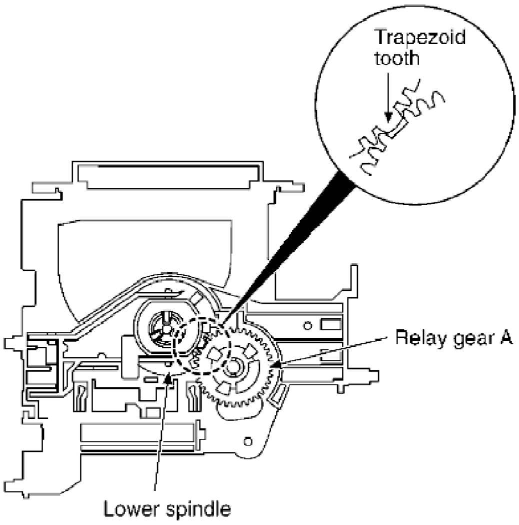
Step 15 Rotate the UP/DOWN base at a 90° angle. Then, spread the hold bars of loading stopper and remove the UP/DOWN base.

[Installation for loading stopper ass'y]

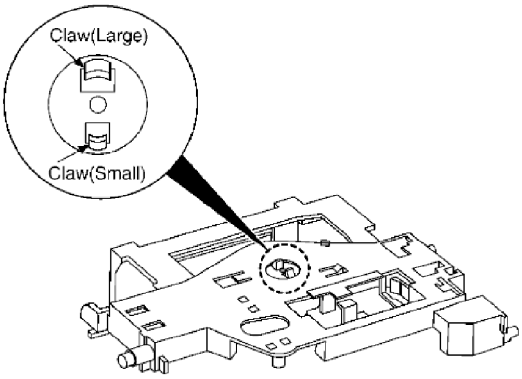
Step 1 Align the claw of loading stoppers ass'y with the slot of spindle base. (Caution should be exercised when alignment of claw due to the size of claws.)


Loading stopper ass'y
Claw(Large)
Slot(Large)
Claw(Small)
Slot(Small)

Step 2 Lower the loading stopper ass'y, and then align the lower spindle with the trapezoid tooth of relay gear A.


Trapezoid tooth
Relay gear A
Lower spindle

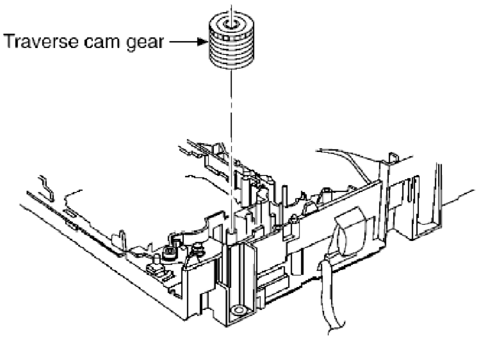
Step 3 Force the loading stopper ass'y, latch the claw firmly.

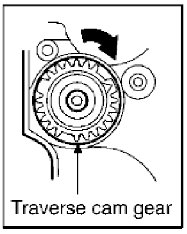

Claw(Large)
Claw(Small)

[Reassembly for mechanism base drive unit]

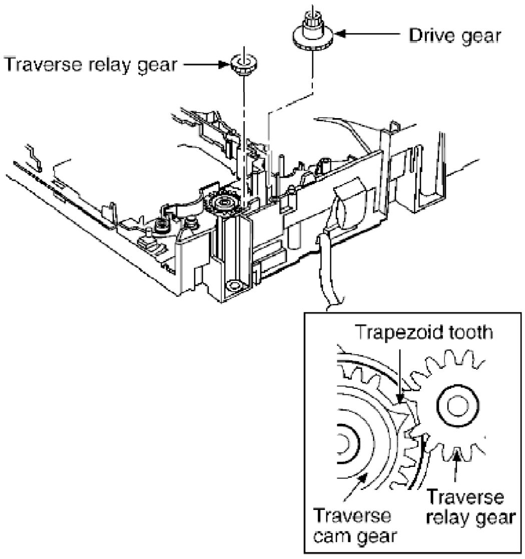
Step 1 Install the traverse cam gear.

Step 2 Rotate the traverse cam gear to the direction of arrow.

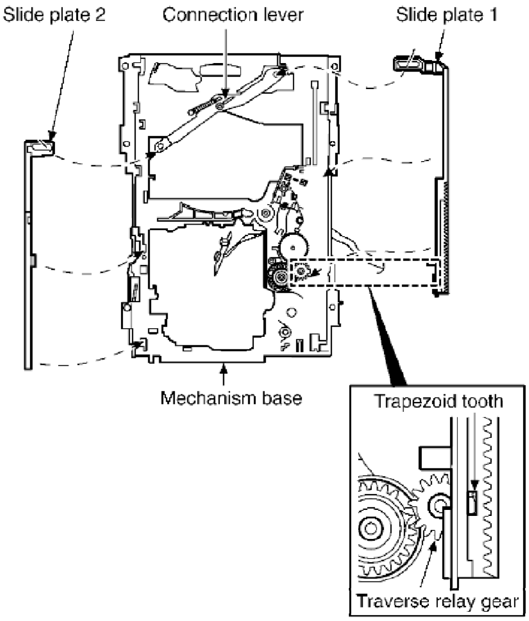

Traverse cam gear


Traverse cam gear

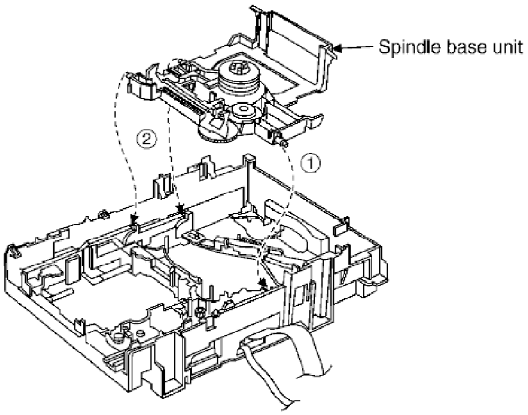
Step 3 Install the drive gear and traverse relay gear.


Traverse relay gear
Drive gear
Trapezoid tooth
Traverse cam gear
Traverse relay gear

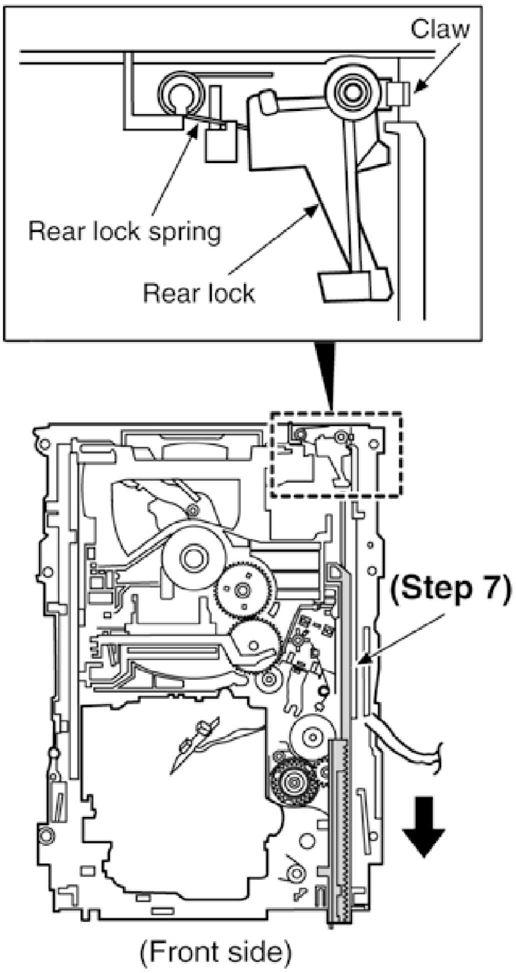
***When installing the traverse relay gear, align the trapezoid tooth of gear with tooth of traverse cam gear.**


Slide plate 2
Connection lever
Slide plate 1
Mechanism base
Trapezoid tooth
Traverse relay gear

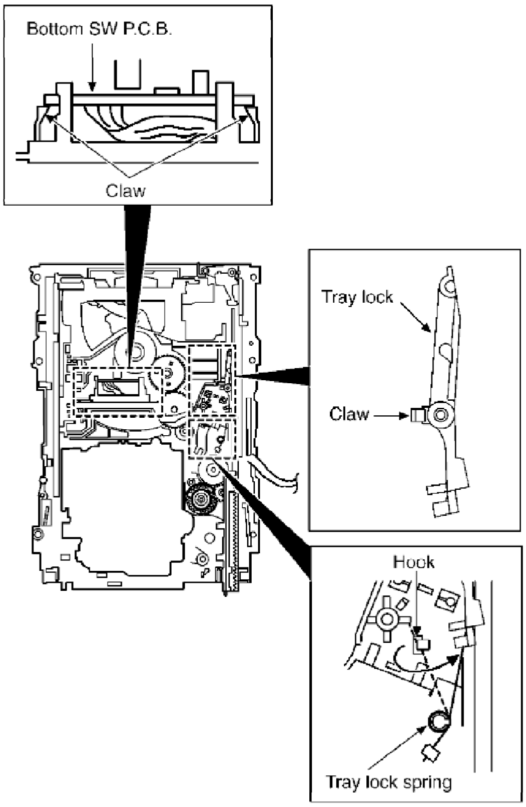
Step 4 Install the slide plate 2 to the mechanism base, and then match to the connection lever.
Step 5 Install the slide plate 1 to the mechanism base, and then match to the connection leve and align the trapezoid tooth of traverse relay gear with the slide plate 1.


Spindle base unit
②
①

Step 6 Install the spindle base unit. (First, slide plate 1.)

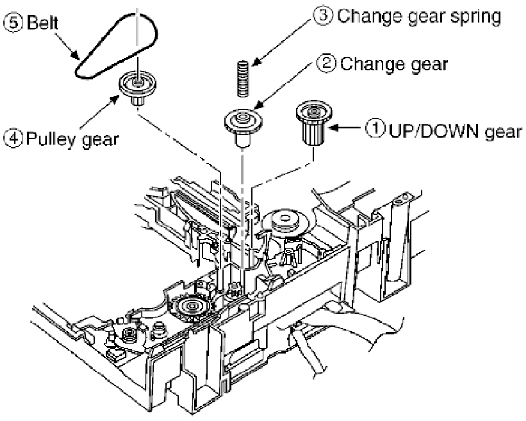

Claw
Rear lock spring
Rear lock
(Step 7)
(Front side)

Step 7 Move the slide plate 1 to forward fully.
Step 8 Install the rear lock. (The claw should be latched.)
Step 9 Install the Spindle Position P.C.B.. (The claw should be latched.)
Step 10 Install the tray lock. (The claw should be latched.)

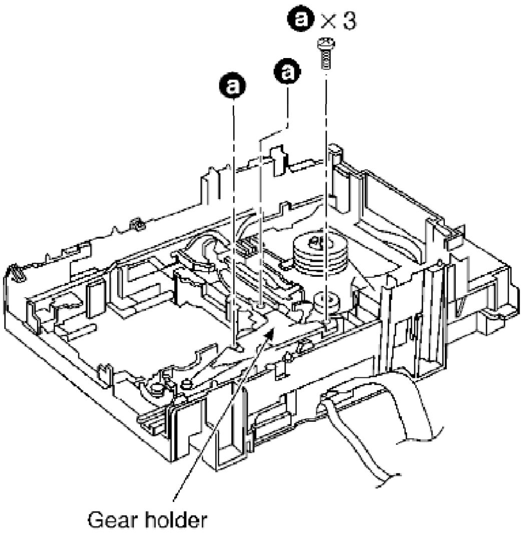

Bottom SW P.C.B.
Claw
Tray lock
Claw
Hook
Tray lock spring

Step 11 Remove the tray lock spring from hook,and then latch to the tray lock.

Step 12 Install the UP/DOWN gear, change gear, change gear spring, pulley gear and belt in the order of (1) - (5).


⑤Belt
③Change gear spring
②Change gear
④Pulley gear
①UP/DOWN gear

Step 13 Install the gear holder, and then tighten the screw (a).



Step 14 Install the tray base, traverse ass'y, mechanism cover and upper plate.

[Operation check after servicing]

Check the proper operation of following items with gear and hexagonal screwdriver.

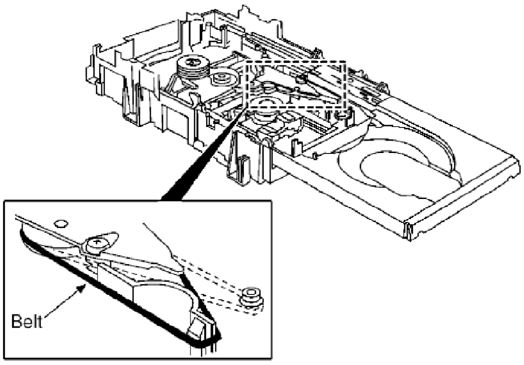
1. Open/close of tray base.

2. Moving the tray base to the stock side.

3. UP/DOWN operation of spindle base unit.

4. UP/DOWN operation of traverse ass'y.

9.12.4. Replacement for the motor ass'y



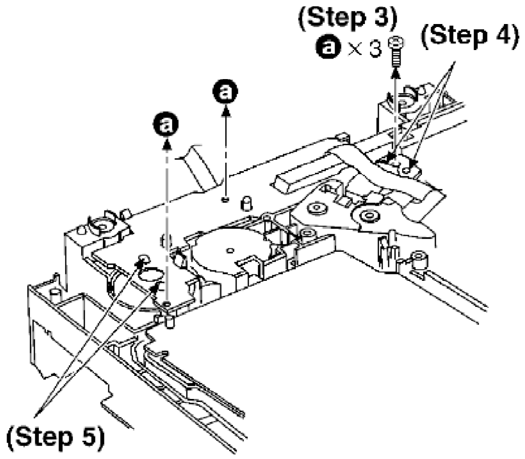
Step 1 Install the belt temporarily.

NOTE:

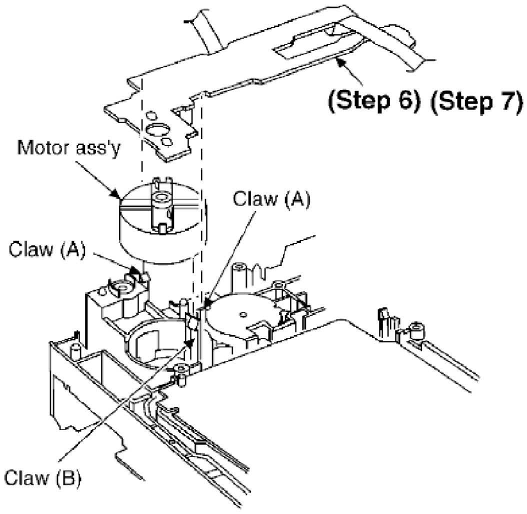
Take care not apply the grease to the belt.

Step 2 Upset the CD loading unit.

Step 3 Remove 3 screws.


(Step 3)
a × 3
(Step 4)
a
a
(Step 5)

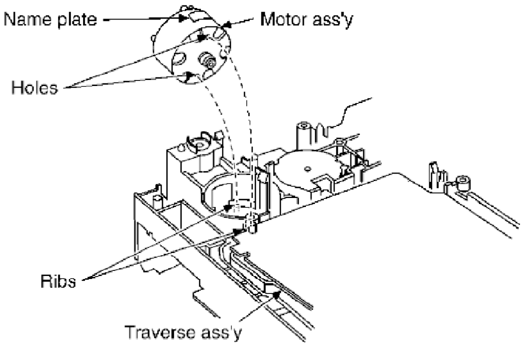
Step 4 Unsolder the plunger terminals (2 points).
Step 5 Unsolder the motor terminals (2 points).


(Step 6) (Step 7)
Motor ass'y
Claw (A)
Claw (A)
Claw (B)

Step 6 Release the 2 claws (A), and then remove the Motor P.C.B.
Step 7 Release the claw (B), and then remove the motor ass'y.
[Notice for motor ass'y installation]

1. Locate the name plate of motor to the traverse ass'y.

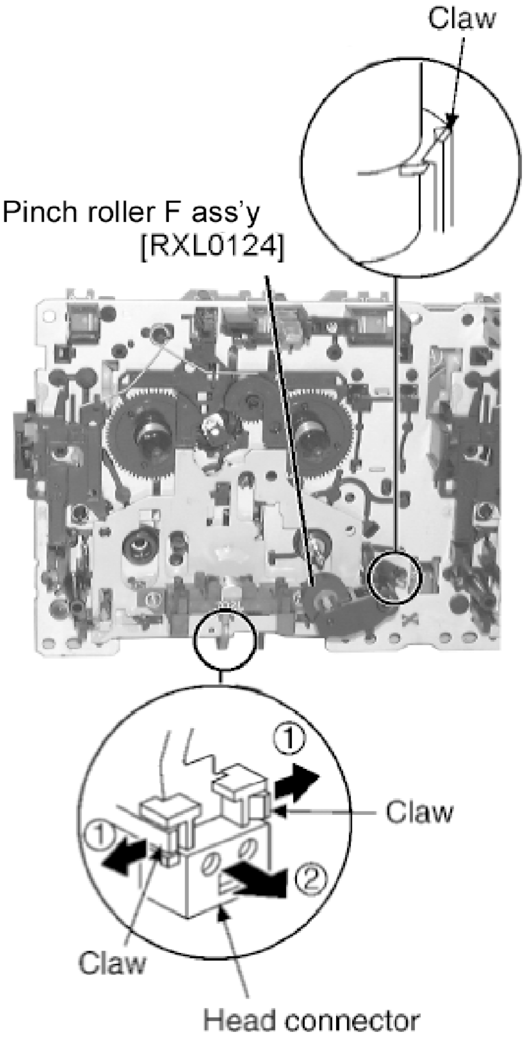
2. Align the hole of motor with the ribs.


Name plate
Motor ass'y
Holes
Ribs
Traverse ass'y

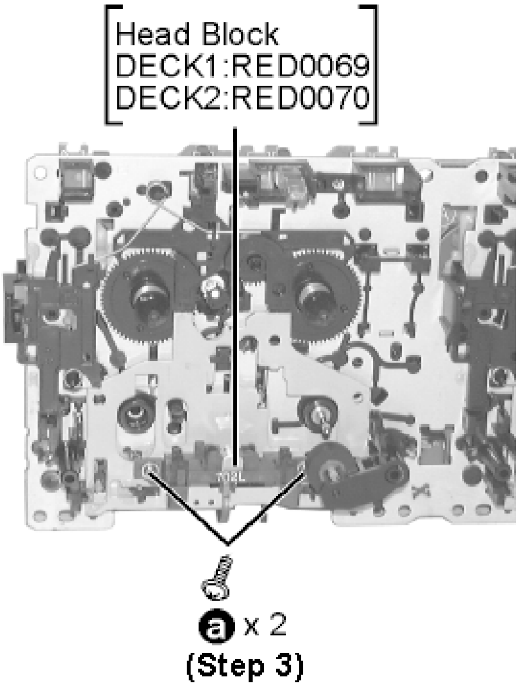
9.13. Replacement for the pinch roller ass'y and head block

- **Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet**
- **Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid**
- **Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit**
- **Follow the (Step 1) - (Step 3) of Item 9.10 - Disassembly of Front Panel Unit**
- **Follow the (Step 1) - (Step 5) of Item 9.11 - Disassembly of Deck Mechanism Unit**

*** The mechanism as shown below is for DECK1. For DECK 2, perform the same procedures.**


Claw
Pinch roller F ass'y
[RXL0124]
①
Claw
①
②
Claw
Head connector

Step 1 Release the 2 claws, and then remove the pinch roller (R), (F).
Step 2 Release the 2 claws, and then remove the head connector.

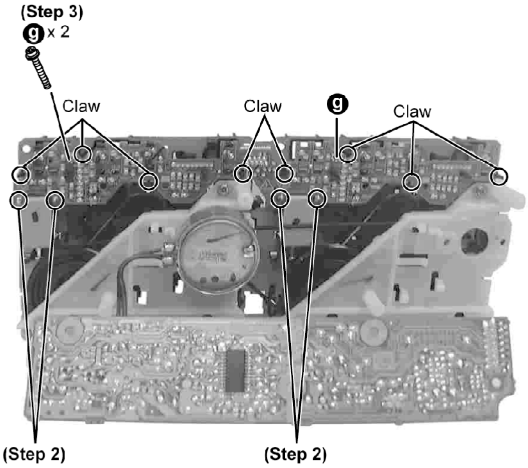


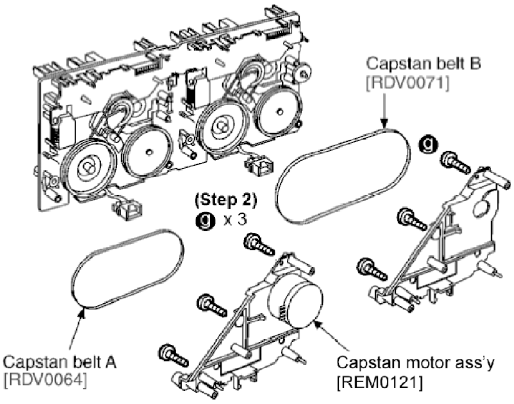
Step 3 Remove 2 screws.

9.14. Replacement for the Deck motor ass’y, capstan belt A, capstan belt B and winding belt

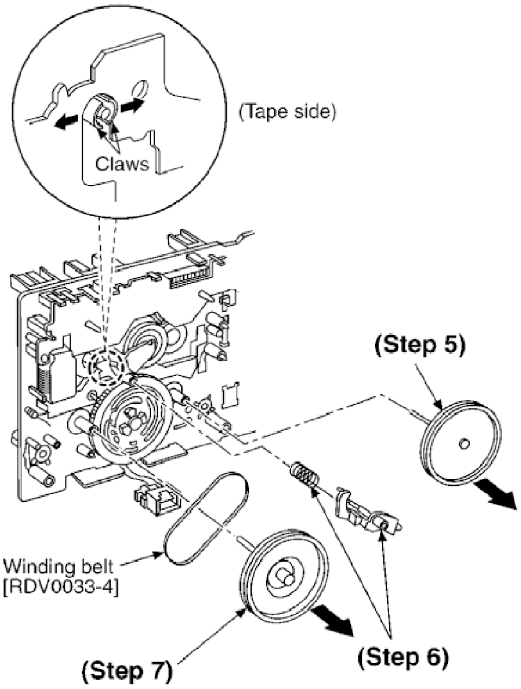
- **Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet**
- **Follow the (Step 1) - (Step 6) of Item 9.4 - Disassembly of CD Lid**
- **Follow the (Step 1) - (Step 3) of Item 9.6 - Disassembly of CD Mechanism Unit**
- **Follow the (Step 1) - (Step 3) of Item 9.10 - Disassembly of Front Panel Unit**
- **Follow the (Step 1) - (Step 5) of Item 9.11 - Disassembly of Deck Mechanism Unit**

Step 1 Release the 2 claws, and then remove the head connector.
Step 2 De-solder plunger point.
Step 3 Remove the Deck Mechanism P.C.B.


(Step 3)
g x 2
Claw
Claw
g
Claw
(Step 2)
(Step 2)


Capstan belt B
[RDV0071]
g
(Step 2)
g x 3
Capstan belt A
[RDV0064]
Capstan motor ass'y
[REM0121]

Step 4 Remove 3 screws.


(Tape side)
Claws
(Step 5)
Winding belt
[RDV0033-4]
(Step 7)
(Step 6)

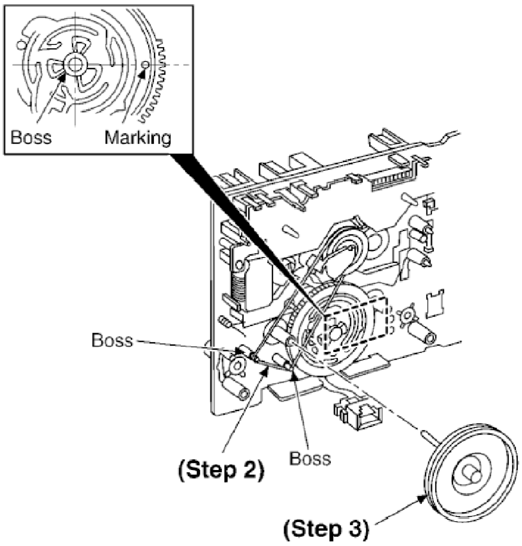
Step 5 Remove the flywheel R.

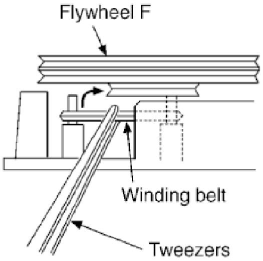
Step 6 Release the claw of tape side, and then remove the winding lever and spring.

Step 7 Remove the flywheel F.

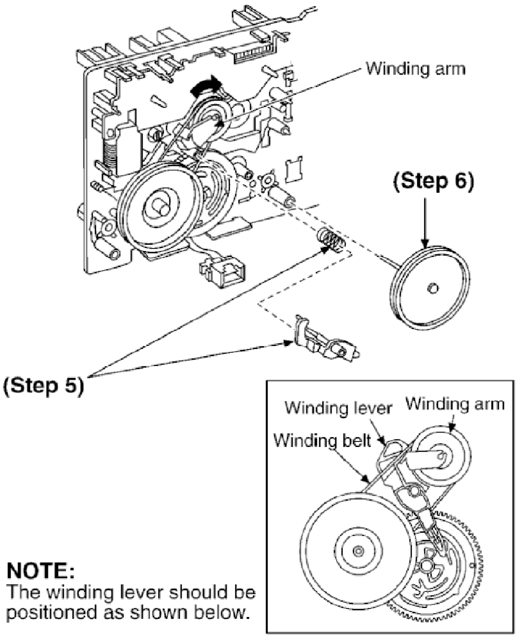
[Installation of the belt]

Step 1 The boss and marking should be positioned horizontally.


Boss
Marking
Boss
(Step 2)
Boss
(Step 3)

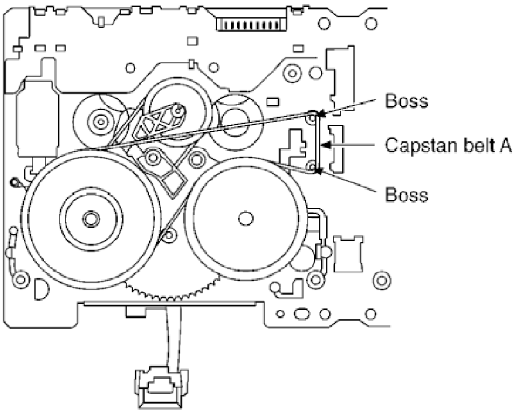

Flywheel F
Winding belt
Tweezers

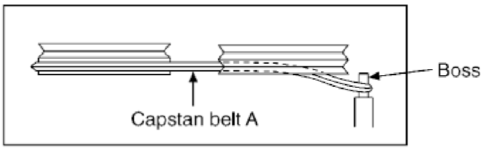
Step 2 Put the winding belt on the pulley temporarily.
Step 3 Install the flywheel F.
Step 4 Put the winding belt on the flywheel F.
Step 5 Install the winding lever and spring while pressing the winding arm in the direction of arrow.
Step 6 Install the flywheel R.


Winding arm
(Step 6)
(Step 5)
Winding lever
Winding arm
Winding belt

NOTE:
The winding lever should be positioned as shown below.

Step 7 Put the capstan belt A temporarily as shown below.

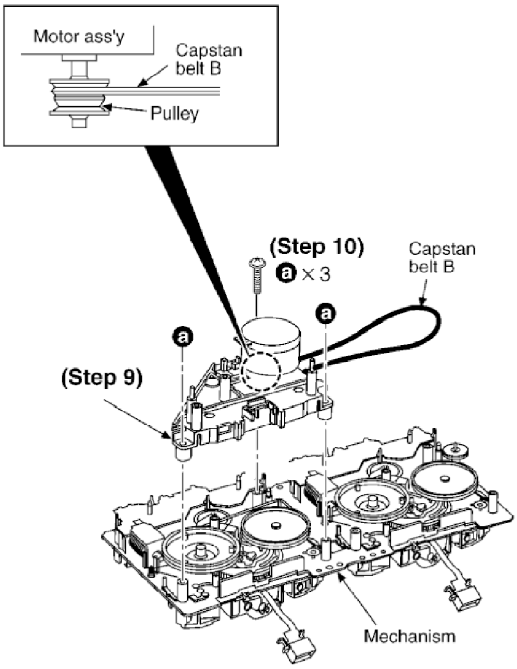

Boss
Capstan belt A
Boss


Boss
Capstan belt A

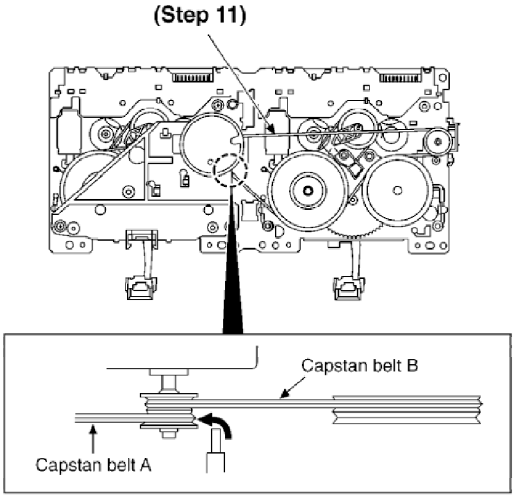
(Side view)

Step 8 Put the capstan belt B on the motor ass'y pulley.

Step 9 Install the sub chassis to the mechanism, and then tighten screws.


Motor ass'y
Capstan belt B
Pulley
(Step 10)
ⓐ × 3
Capstan belt B
ⓐ
ⓐ
(Step 9)
Mechanism

Step 10 Remove 3 screws.
Step 11 Put the capstan belt B as shown below.

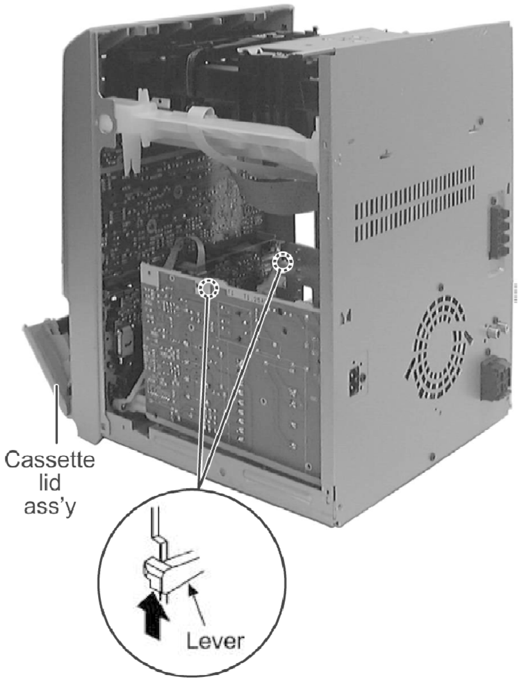

(Step 11)
Capstan belt B
Capstan belt A

Step 12 Put the capstan belt A on the motor ass'y pulley.

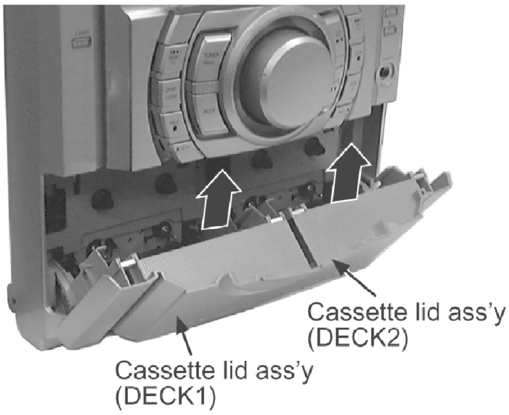
9.15. Replacement for the cassette lid ass'y

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

Step 1 Lift up the lever upward, open the cassette lid ass'y. (For DECK1 and DECK2)


Cassette
lid
ass'y
Lever

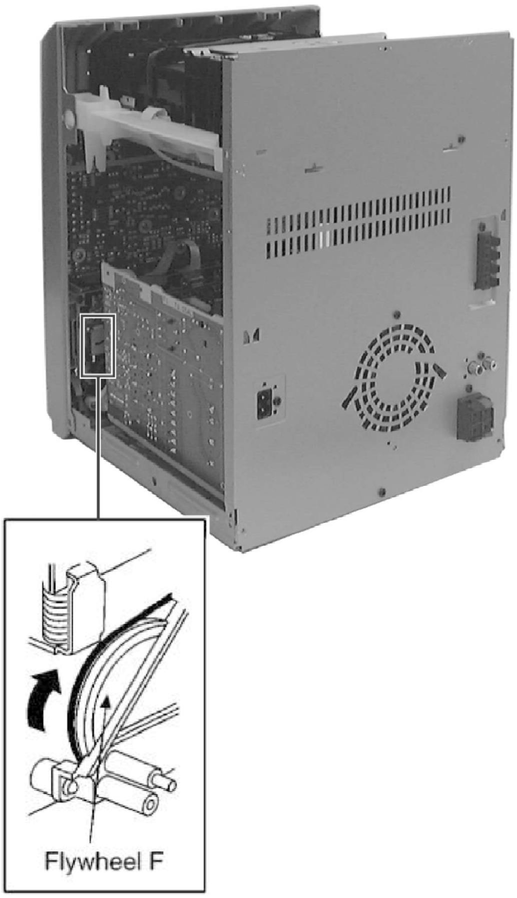
Step 2 Push up the cassette lid ass'y in the direction of arrow. (For DECK1 and DECK2).


Cassette lid ass'y
(DECK2)
Cassette lid ass'y
(DECK1)

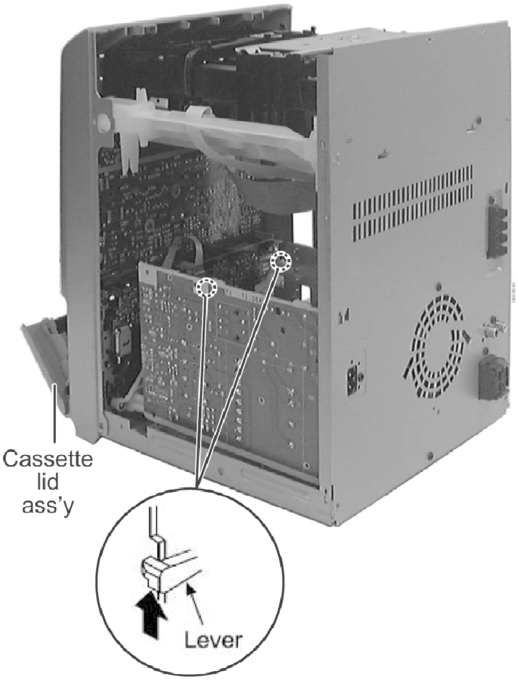
9.16. Rectification for tape jam problem

- Follow the (Step 1) - (Step 2) of Item 9.3 - Disassembly of Top Cabinet

Step 1 If a cassette tape cannot be removed from the deck (the tape is caught by the capstan or pinch roller during playback or recording), rotate the flywheel F in the direction of the arrow to remove it.



Step 2 Push the lever upward and open the cassette lid ass'y. Remove the cassette tape.


Cassette
lid
ass'y
Lever

10. Checking for major P.C.Bs

Note:
Checking of all major P.C.Bs (Main P.C.B., Panel P.C.B., Transformer P.C.B., Deck P.C.B., Deck Mechanism P.C.B. and Power P.C.B.) can be carried out using below procedures.
For the disassembling procedures, refer to Section 9.

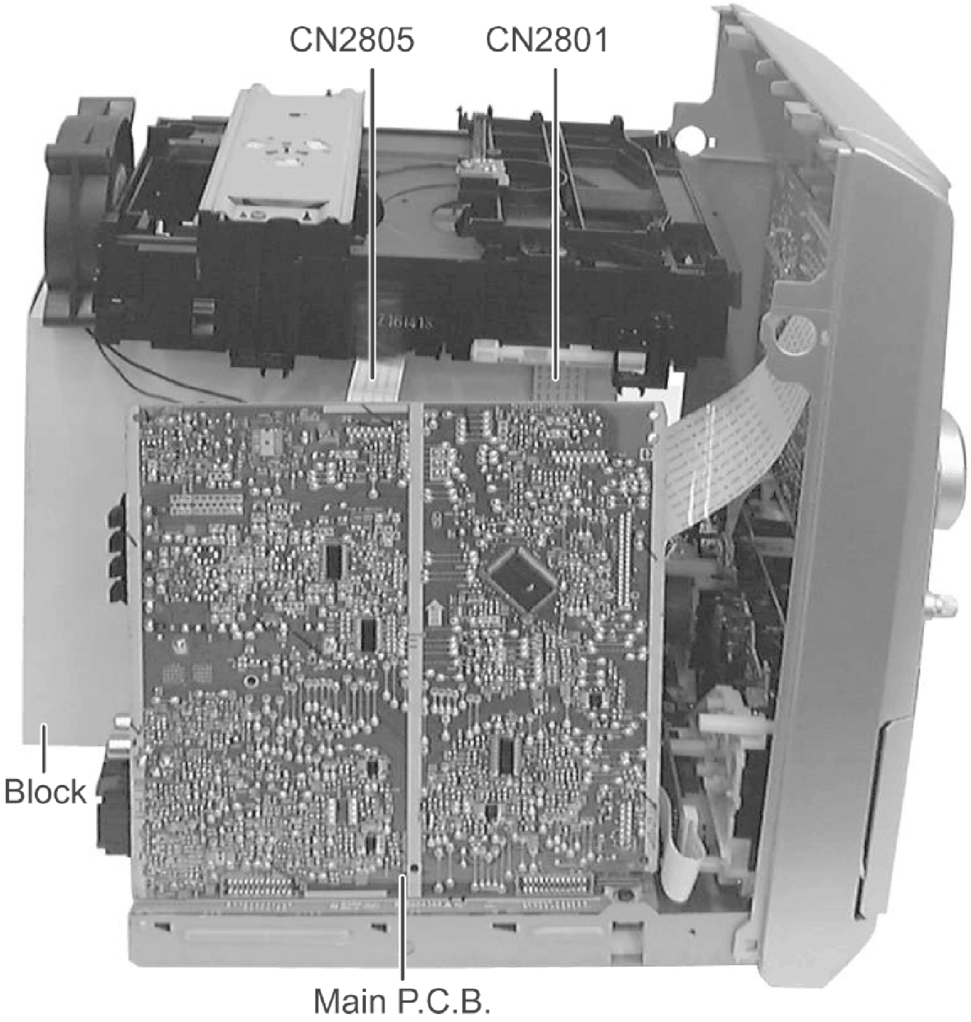
10.1. Checking of Main P.C.B.

1. Remove Top Cabinet and Rear Panel.

2. Remove CD Lid.

3. Disassemble CD Mechanism Unit.

4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit.



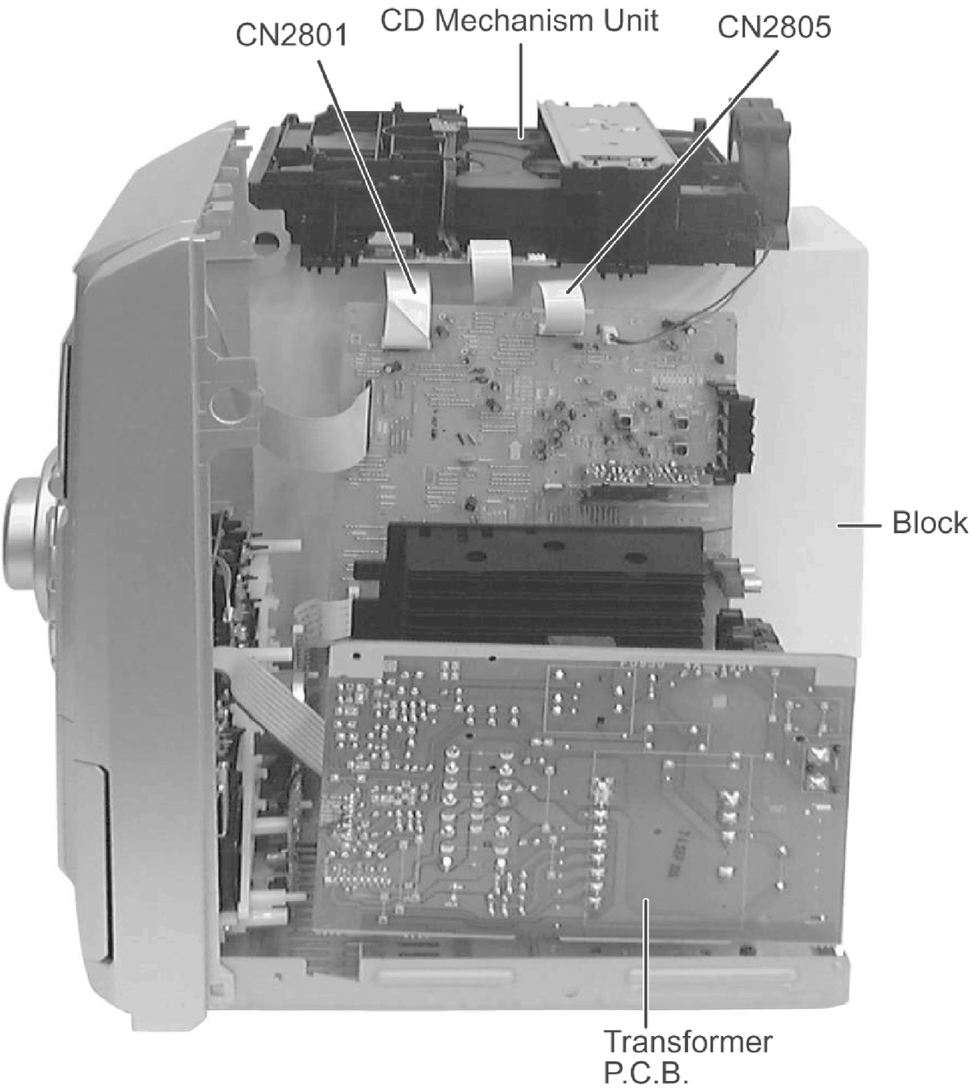
10.2. Checking of Transformer P.C.B.

1. Remove Top Cabinet and Rear Panel.

2. Remove CD Lid.

3. Disassemble CD Mechanism Unit.

4. Connect FFC wires (CN2801 & CN2805) from CD Mechanism Unit.


CN2801
CD Mechanism Unit
CN2805
Block
Transformer P.C.B.

10.3. Checking of Panel, Deck & Deck Mechanism P.C.B.

1. Remove Top Cabinet.

2. Remove CD Lid.

3. Disassemble CD Mechanism Unit.

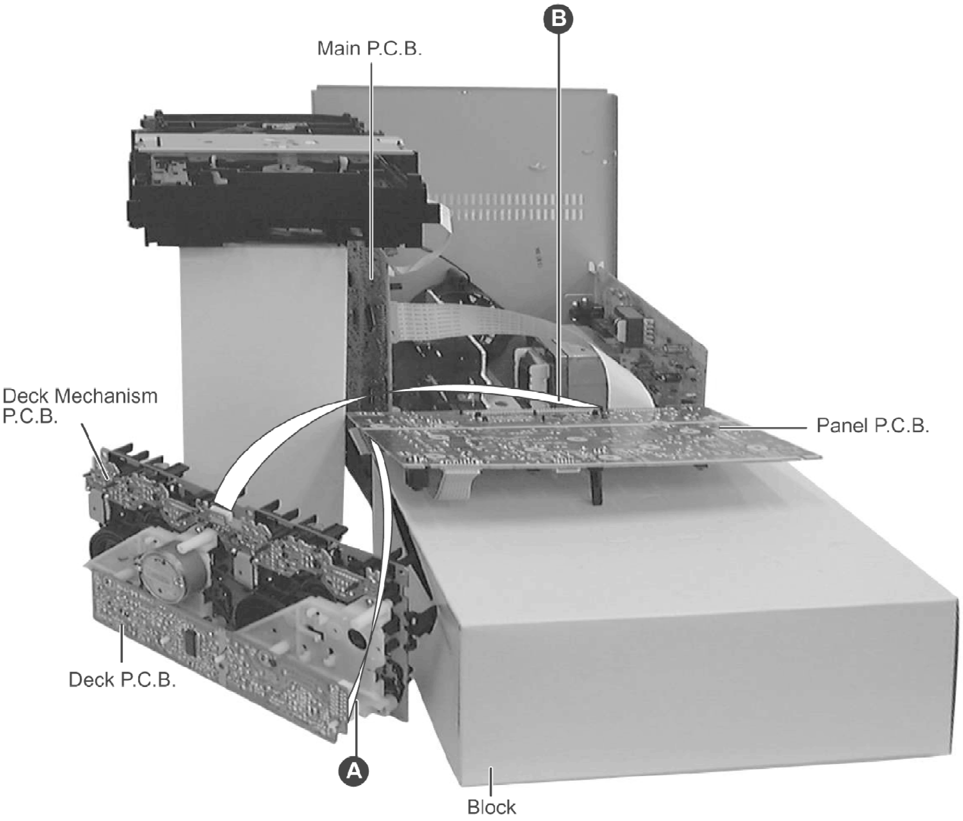
4. Remove volume knob at Front Panel Unit.

5. Disassemble Panel P.C.B.

6. Disassemble Deck Mechanism Unit.

7. Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.

8. Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.


B
Main P.C.B.
Deck Mechanism P.C.B.
Panel P.C.B.
Deck P.C.B.
A
Block

Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	**REEX0485 (14 Pins)**
(B) Panel P.C.B. - Deck Mechanism P.C.B.	**REEX0484 (10 Pins)**

10.4. Checking of Power P.C.B.

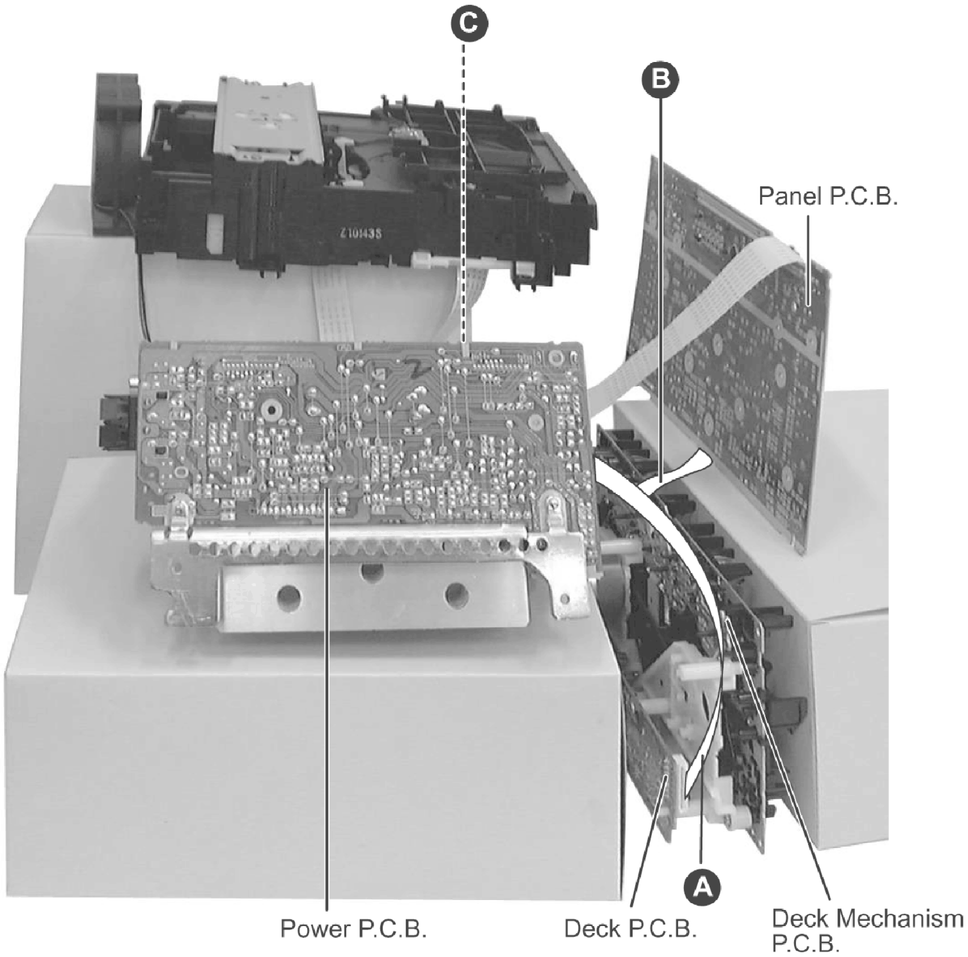
1. Remove Top Cabinet and Rear Panel.

2. Remove CD Lid.

3. Disassemble CD Mechanism Unit.

4. Remove 3 screws at Transformer P.C.B..

5. **Remove 2 screws at heat sink and 1 screw at Power P.C.B.**
6. **Flip the Power P.C.B.**
7. **Insulate the Power P.C.B. with insulation material to avoid short circuit.**
8. **Use the extension cable (A) to reconnect (CN1001) Deck P.C.B. and (CN2803) Main P.C.B.**
9. **Use the extension cable (B) to reconnect (CP6401) Panel P.C.B. and (CN971) Deck Mechanism P.C.B.**
10. **Use the extension cable (C) to reconnect (H5950/W5950) Power P.C.B. and (CN5950) Transformer P.C.B.**


C
B
Panel P.C.B.
Z10143S
A
Power P.C.B.
Deck P.C.B.
Deck Mechanism P.C.B.

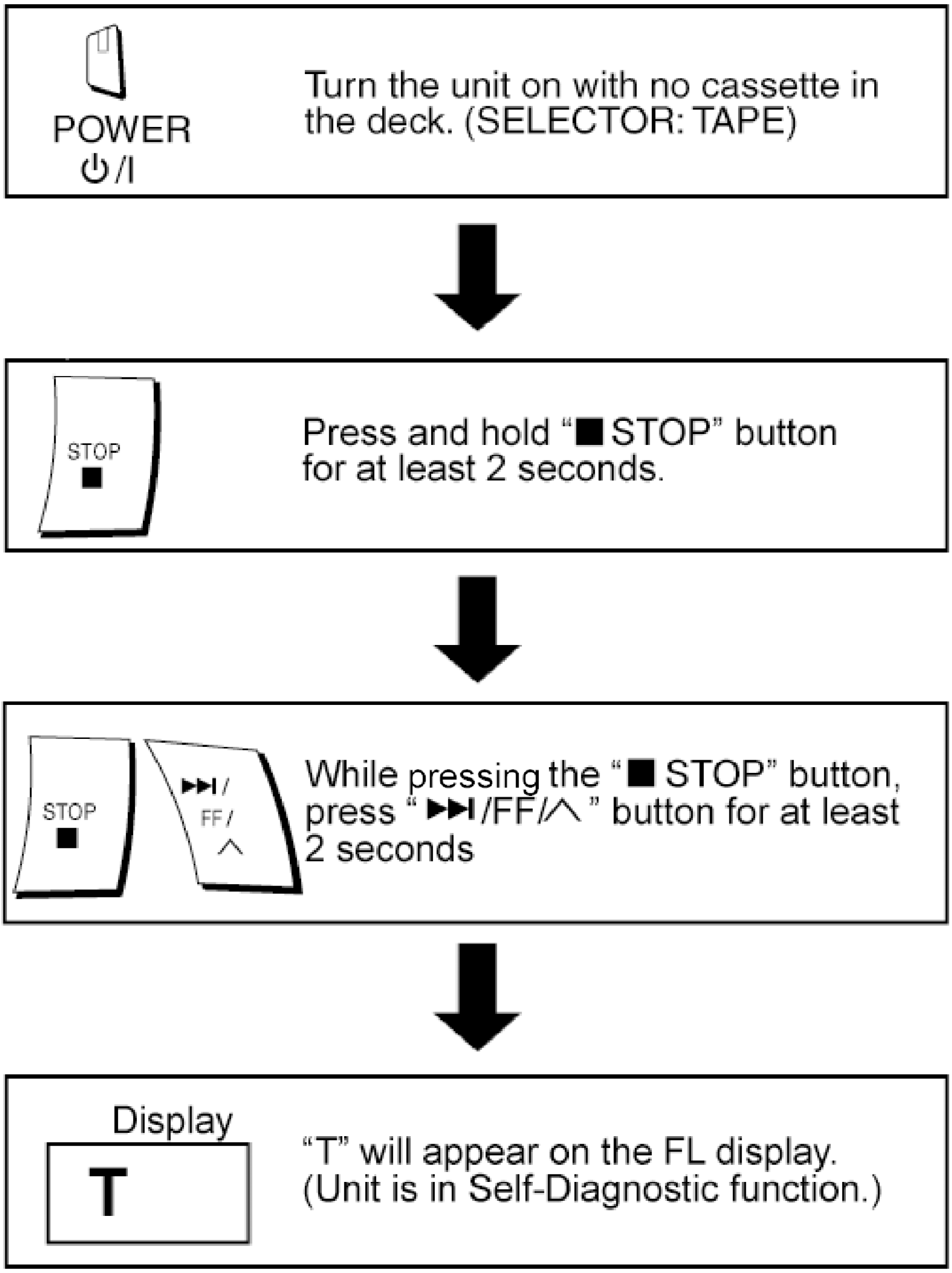
Service Tools	
Extension FFC	
(A) Deck P.C.B. - Main P.C.B.	**REEX0485 (14 Pins)**
(B) Panel P.C.B. - Deck Mechanism P.C.B.	**REEX0484 (10 Pins)**
(C) Power P.C.B. - Transformer P.C.B.	**RFKAK330 (9 Pins)**

11. Self-Diagnostic Function

11.1. Self-diagnostic display

This unit is equipped with a self-diagnostic display function which, will display an error code corresponding to the problem occuring.
Use this function when performing checking maintenance on the unit.

11.2. How to enter the Self-Diagnostic Function



Turn the unit on with no cassette in the deck. (SELECTOR: TAPE)

Press and hold "■ STOP" button for at least 2 seconds.

While pressing the "■ STOP" button, press " ⏭/FF/∧ " button for at least 2 seconds

"T" will appear on the FL display. (Unit is in Self-Diagnostic function.)

11.3. Cassette Mechanism Test (For error code H01, H02, H03, F01)

1. Press "TAPE, DECK 1/2" to select Deck 2.

2. Load a cassette tape with the erasure prevention tab, remove from left side only and close the cassette holder.

3. Press "FAST FORWARD MEMORY" (Tape will be stop after 2 seconds)

4. Load a cassette tape with the erasure prevention tab, remove

from right side only and close the cassette holder.

5. Press “REVERSE FM MODE/BP” (Tape will be stop after 2 seconds)
6. Load a pre-recorded tape with both side record tabs intact and close the cassette holder.
7. Press “PLAY/TUNE/TIME ADJ UP” (After TPS function, tape will stop automatically)
8. Press “REC/STOP” (Tape will not move)
9. Press “STOP/TUNE MODE” to indicate Error code.

   - If several problem exist, error code will change each time when “ ■ /STOP” is pressed.
     (e.g. H01 → H03 → F01 .....etc.)

10. Press “TAPE, DECK 1/2” to select Deck 1.
11. Repeat step 2 to 9 to test Deck 1. (Tape Deck 1 will not check H02 because of no recording function)

11.4. CD Mechanism Test (F15, F26, F16, F17, F27, F28, F29, F30, H15 & H16)

1. Press [▶/ II, CD] (set to CD Mode) on main unit.
2. Press “CD DIRECT PLAY (1)” and [⏏, OPEN/CLOSE] button on main unit.
3. Press [⏏, OPEN/CLOSE] to close the tray.
4. Press “CD DIRECT PLAY (5)” and [⏏, OPEN/CLOSE] wait until the tray is open.
5. Press [⏏, OPEN/CLOSE] and remove the CD.
6. Press [⏏, OPEN/CLOSE] to close the tray.
7. Press “ ■ /STOP” to indicate Error Code.

- If several problem exist, error code will change each time when “ ■ /STOP” is pressed. (e.g. F15 → F26 → F16 ....etc).

11.5. To clear all Error code

1. Press [■, STOP] and hold button for 5 seconds.
2. FL indicator shows “CLEAR” for 1 second and change to “T”.

11.6. To exit from Self-Diagnostic function

1. Press [⏻/I, POWER] button on main unit or remote control.

11.7. Power Amplifier Failure (F61)

1. When power amplifier fail, F61 will indicate automatically.

11.8. Description of Error Code

11.8.1. Abnormality detection for Deck Mechanism block

No.	Abnormal Items	Error Display	Method of Detection
1	MODE SW abnormal	H01	Normal operation during mecha transition, MOD abnormal is memorized. The content of abnorm can be confirmed in the abnormal detection mo explained in the later section.
2	REC INH SW abnormal	H02	The content of abnormality can be confirmed in abnormal detection mode explained in the later
3	HALF SW abnormal	H03	The content of abnormality can be confirmed in abnormal detection mode explained in the later
4	Reel pulse abnormal	F01	The content of abnormality can be confirmed in abnormal detection mode explained in the later

11.8.2. Abnormality detection for CD/Changer block

No.	Abnormal Items	Error Display	Method of Detection
1	REST SW abnormal	F15	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the REST SV not detected within the specified time and shal memorized.
2	Transmission error between CD servo LSI and micon	F26	Under normal operation (Self-Diagnostic Mode inclusive), this error occurs when the selectior to CD and SENSE=’H’ is detected and SENSE= not detected within a fail safe time (20ms) after command transmission was sent.
3	CLAMP SW abnormal	F16	Refer to section 11.8.4 (Mechanism Error Code [M-0A] error is detected.
4	BOTTOM SW abnormal	F17	Refer to section 11.8.4 (Mechanism Error Code [M-09] error is detected.
5	POSITION SW abnormal	F27	Refer to section 11.8.4 (Mechanism Error Code [M-05 ~ M-08] error is detected.
6	SW1 abnormal	F28	Refer to section 11.8.4 (Mechanism Error Code [M-02 ~ M-08] error is detected.
7	SW2 abnormal	F29	Refer to section 11.8.4 (Mechanism Error Code [M-02 ~ M-08] error is detected.
8	OPEN SW abnormal	H15	Refer to section 11.8.4 (Mechanism Error Code [M-01] error is detected.
9	CLOSE SW abnormal	H16	Refer to section 11.8.4 (Mechanism Error Code [M-01] error is detected.
10	DISC SENSOR	F30	Refer to section 11.8.4 (Mechanism Error Code [M-01] error is detected.

11.8.3. Power supply related error detection

No.	Abnormal Items	Error Display	Method of Detection
1	POWER AMP output abnormal	F61	During normal operation, if DCDET becomes ‘L normal POWER OFF process shall not be exec PCNT shall be switched to ‘L’ immediately. GO shall not be displayed and the error display F6 displayed instead. 2 seconds after the F61 display, ECONO shall b ‘L’ and FL display shall be turned off. The error content shall be memorized when the abnormality occurs and can be displayed in th mecha self-diagnostic mode described later.

11.8.4. Error Code (CR20 Mechansim)

1. If mechanism problem occurs during normal or aging mode, the

error code is “remembered” and shown on the FL display.

2. Reset Condition of Error Code

A. During cold start of micro-processor IC.

B. Restart of aging mode for the mechanism unit.

3. Mechanism Error Code

Mechansim Error Code Table

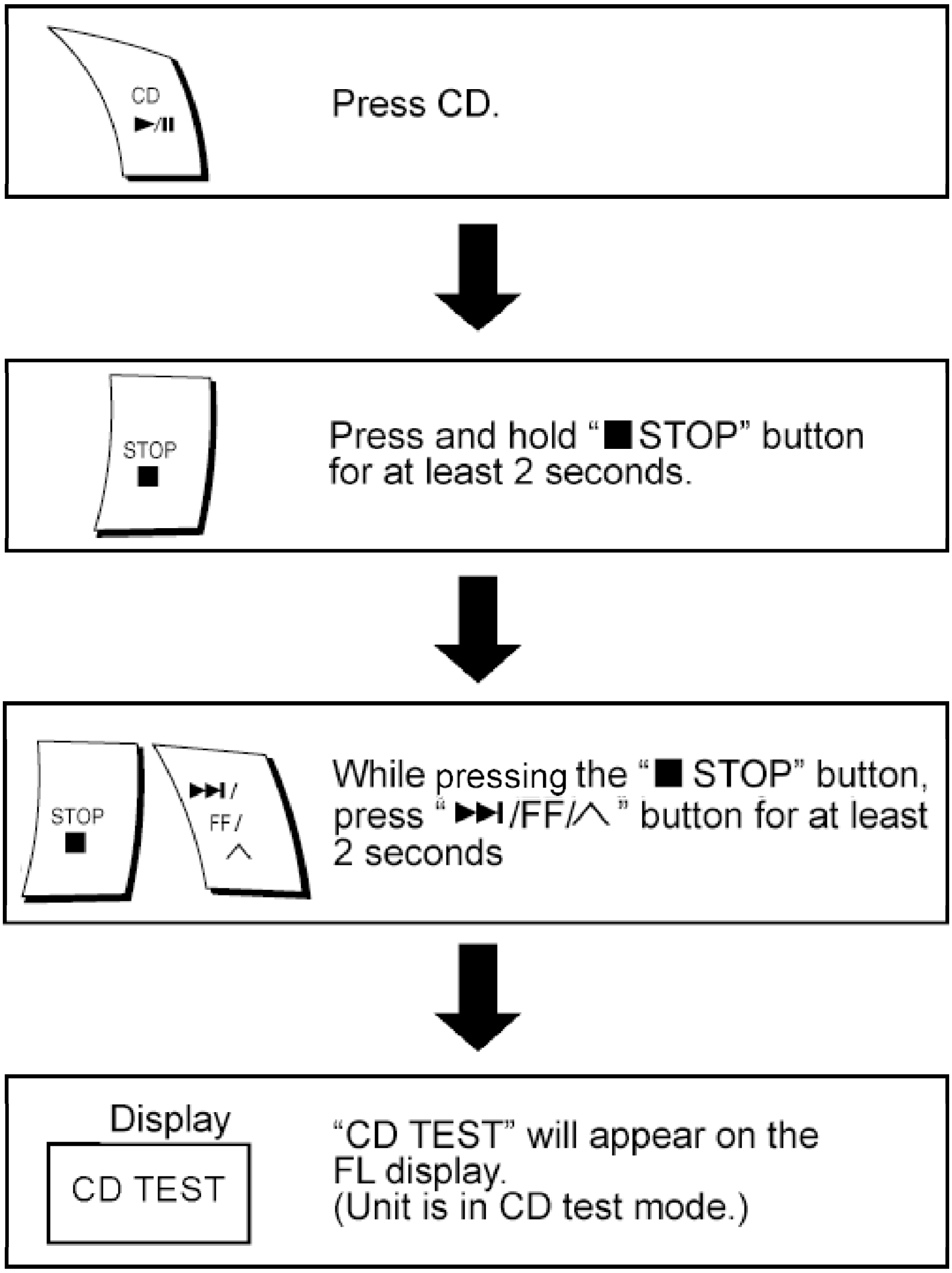
Error Code	Description
M-00	No Error
M-01	OPEN Position - Horizontal Motion Abnormality at play position
M-02	PLAY Position - Horizontal Motion Abnormality at stock position
M-03	PLAY Position - Horizontal Motion Abnormality during changing position
M-04	CHANGE Position - Horizontal Error of Stock position
M-05	CHANGE Position - Ascending motion Error
M-06	CHANGE Position - Descending motion Error
M-07	STOCK Position - Ascending motion Error
M-08	STOCK Position - Descending motion Error
M-09	Abnormality during change position (bottom switch)
M-0A	Clamp Error
M-0B	Access Failure - Access Time of more tha 30 secs (Total time of automatic → Read TOC → Track access)

4. When the mechanism unit stops due to error during aging model, error code is remembered and counts of the errors are displayed on the FL display.

12. CD Test Mode Function

This CD test mode is provided to check CD unit without connecting to changer loading mechanism. This mode shall operate CD PLAY with CD unit being connected only and CD Automatic Alignment result is shown on FL display.

12.1. How to set CD test mode


CD
►/II
STOP
■
STOP
■
►►I/
FF/
⋀
Display
CD TEST

Press CD.

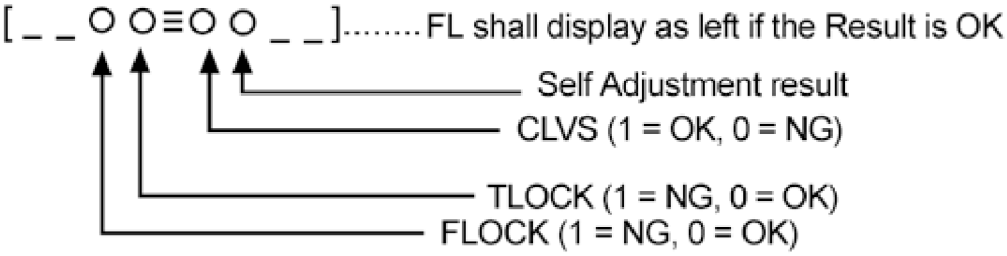
Press and hold "■STOP" button for at least 2 seconds.

While pressing the "■ STOP" button, press "►►I/FF/⋀" button for at least 2 seconds

"CD TEST" will appear on the FL display.
(Unit is in CD test mode.)

12.2. CD Automatically Adjustment result indication

Under CD test mode, pressing the numeric key '0' on the remote controller will display the auto adjustment result. FLOCK, TLOCK and CLVS status shall be shown as below:


[_ _ O O≡O O _ _]........FL shall display as left if the Result is OK
Self Adjustment result
CLVS (1 = OK, 0 = NG)
TLOCK (1 = NG, 0 = OK)
FLOCK (1 = NG, 0 = OK)

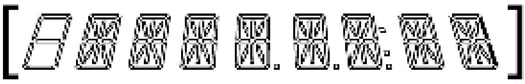
During the above display, executing CD PLAY will display auto adjustment result for CD PLAY mode.

12.3. CD Mecha Aging Test Mode (CR20)

1. Functional summary of CD aging test mode
   It is for the purpose to determine the reliability of the CD changer.

2. To enter into CD aging test mode
   a) First, enter into self-diagnostic mode (Refer to Section 11.2. How to enter the Self-Diagnostic Function)
   b) In the self-diagnostic mode, switch the SELECTOR to [▶/II, CD] and press [|◀◀/REW/V] . It will enter into CD aging test mode.
   When in CD aging test mode, the following operation will begin and repeated:
   1. [DISC STOCKER] → DISC LOAD → TRAY OPEN (2 secs) → TRAY CLOSE] as one count.
   2. DISC 1 → DISC 2 → DISC 3 → DISC 4 → DISC 5 → DISC 1........repeating this endlessly.

   - While performing the above operation, the FL display will show the number of its operations starting from 00001. With reference to figure as below.



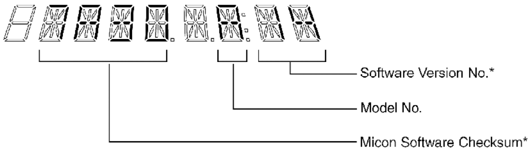
   - It shall move up one counter when the above operations ends. The counter will reset to 00000 when 99999 is reached.
   - To exit CD aging test mode, press [⏻/I, POWER] button, the tray will return to its PLAY position and power will be off.

12.4. Micon ROM Checksum and Version Display Mode

1. Functional Summary
   Display version number and calculated checksum of the micon software.

2. To enter into Micon ROM checksum and Version Display Mode.
   A. Enter into Self-Diagnostic Mode (Refer to Section 11.2).

B. In the Self-Diagnostic Mode, Press ►/ II, CD twice.
The version number and the calculated ROM Checksum of the current software will be displayed on the FL as shown in this example:



* Note: The Software Version No. & Micon Software Checksum differs from set to set.

- The ROM Checksum is calculated on demand, not hard coded.
- The ROM Checksum is calculated by talking the arithmetic SUM of the ROM contents from the program’s START address until the END address.
  START address = [1080]H
  END address = [FFFD]H

13. Measurements and Adjustments

13.1. Cassette Deck Section

- Measurement Condition
- Make sure head, capstan and press roller are clean.
- Judgeable room temperature 20 ± 5 °C (68 ± 9°F)
- Measuring instrument
- EVM (DC Electronic voltmeter)
- Digital frequency counter
- Test Tape
- Tape speed gain adjustment (3 kHz, -10 dB); QZZCWAT

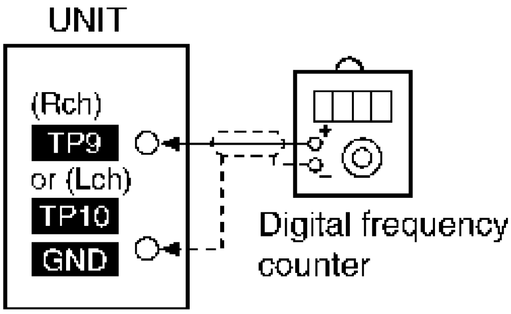
13.1.1. Tape Speed Adjustment (Deck 1/2)

1. Set the tape edit button to “NORMAL” position.
2. Insert the test tape (QZZCWAT) to DECK 2 and playback (FWD side) the middle portion of it.
3. Adjust Motor VR (DECK 2) for the output value shown below.

Adjustment target: 2940 ~ 3060 Hz
(NORMAL speed)

4. After alignment, assure that the output frequency of the DECK 1 FWD are within ±60 Hz of the value of the output frequency of DECK 2 FWD.

Fig.1


UNIT
(Rch)
TP9
or (Lch)
TP10
GND
+
_
Digital frequency
counter

13.1.2. Bias and Erase Voltage Check

1. Set the unit “AUX” position.
2. Insert the Normal blank tape (QZZCRA) into DECK 2 and the unit to “REC” mode (use “ ● REC/STOP” key).
3. Measure and make sure that the output is within the standard value.

Bias voltage for Deck 2	14±4mV (Normal)
Erase voltage for Deck 2	80mV (Normal)

Fig.2

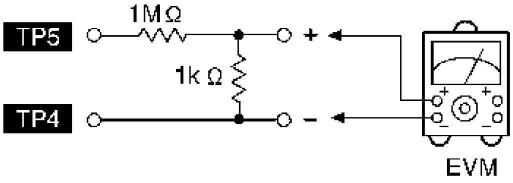
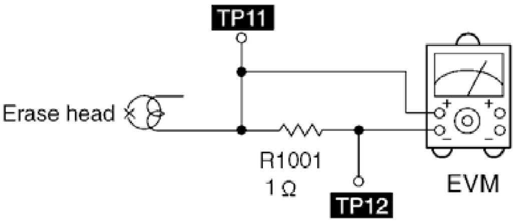

1MΩ
TP5
+
1kΩ
TP4
–
EVM

Fig.3


TP11
Erase head
R1001
1Ω
TP12
EVM

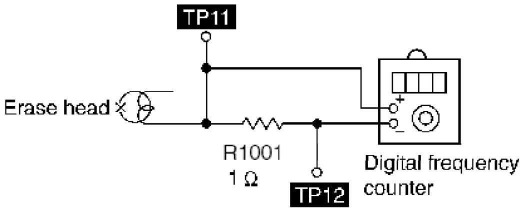
13.1.3. Bias Frequency Adjustment (Deck 1/2)

1. Set the unit to “AUX” position.

2. **Insert the Normal blank tape (QZZCRA) into DECK 2 and set the unit to “REC” mode (● use “REC/STOP” key).**
3. **Adjust L1002 so that the output frequency is within the standard value.**

Standard Value: 97 ±8 kHz

Fig.4


TP11
Erase head
R1001
1 Ω
TP12
Digital frequency counter

13.2. Tuner Section

13.2.1. AM-IF Alignment

1. **Connect the instrument as shown in Fig.5.**
2. **Set the unit to AM mode.**
3. **Apply signal as shown in Fig. 5 from AM-SG.**
4. **Adjust Z2602 so that the output frequency is maximized in Fig. 6.**

Fig.5

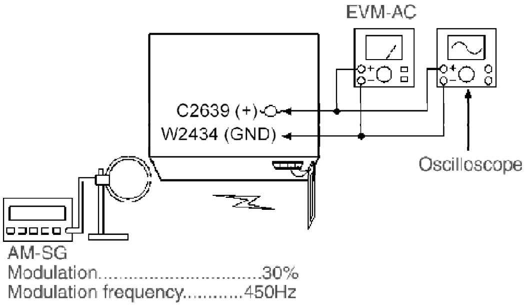
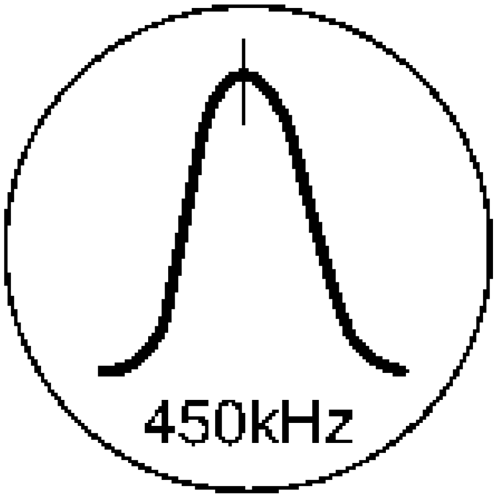

EVM-AC
C2639 (+)
W2434 (GND)
Oscilloscope
AM-SG
Modulation..............................30%
Modulation frequency...........450Hz

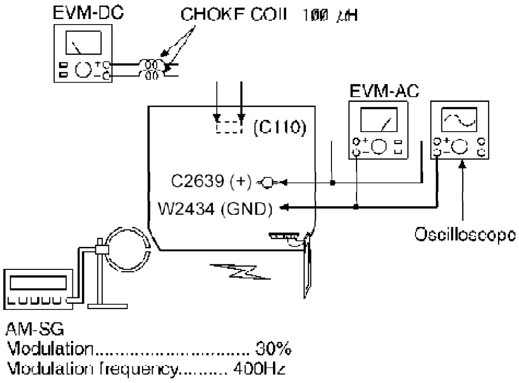
Fig.6



13.2.2. AM RF Adjustment

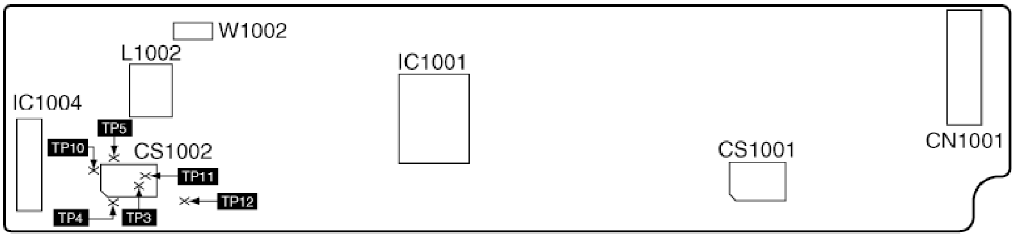
1. Connect the instrument as shown in Fig. 7.
2. Set the unit to AM mode.
3. Set AM-SG to 520kHz.
4. Receive 520kHz in the unit.
5. Adjust Z2602 (OSC) so that the EVM-AC is maximized.
6. Set AM-SG to 600Hz.
7. Receive 600Hz in the unit.
8. Adjust Z2602 (ANT) so that the EVM-SG is maximized.
9. Set AM-SG to 520kHz.
10. Receive 520kHz in the unit.
11. Adjust L2602 (OSC) so that the EVM-DC value is with 1.1±0.5V.

Fig.7

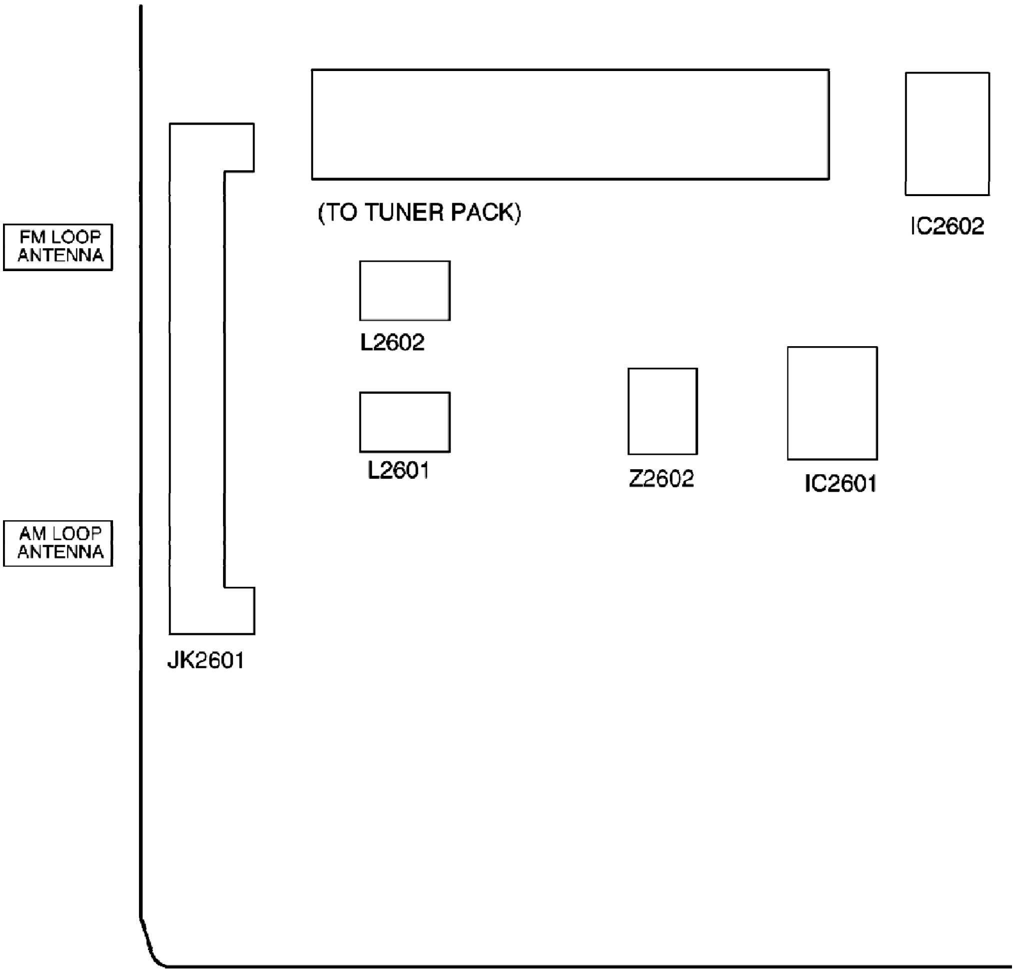

EVM-DC
CHOKE COIL 100 μH
EVM-AC
(C110)
C2639 (+)
W2434 (GND)
Oscilloscope
AM-SG
Modulation.................................. 30%
Modulation frequency.......... 400Hz

13.3. Alignment Points

13.3.1. Cassette Deck Section


W1002
L1002
IC1001
IC1004
TP5
TP10
CS1002
TP11
TP12
TP4
TP3
CS1001
CN1001

13.3.2. Tuner Section


FM LOOP ANTENNA
AM LOOP ANTENNA
(TO TUNER PACK)
IC2602
L2602
L2601
Z2602
IC2601
JK2601

14. Block Diagram

15. Voltage Measurement

16. Schematic Diagram

(All schematic diagrams may be modified at any time with the development of the new technology)

Note:

SW1

: **Push switch**

SW2

: **Push switch**

SW3

: **Open switch**

SW4

: **CD switch**

SW5

: **Load switch**

S951

: **Mode switch**

S952

: **Half switch**

S971

: **Mode switch**

S972

: **Half switch**

S975

: **Recinh_F switch**

S6101

: **CD Open/ Close switch**

S6102

: **CD 1 switch**

S6103

: **CD 2 switch**

S6104

: **CD 3 switch**

S6105

: **CD 4 switch**

S6106

: **CD 5 switch**

S6201

: Rew/Down switch

S6202

: Tuner switch

S6203

: CD switch

S6204

: FF/Up switch

S6205

: Stop switch

S6206

: Deck 1/2 switch

S6207

: Deck 2 switch

S6208

: TAPE switch

S6209

: AUX switch

S6210

: Deck 1 switch

S6301

: Power switch

S6303

: SSEQ switch

S6304

: REC switch

S6305

: Demo/Display switch

S7201

: Rest switch

VR6491

: VR Volume Jog

- The voltage value and waveforms are the reference voltage of this unit measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis. Accordingly, there may arise some error in voltage values and waveformsdepending upon the internal impedance of the tester or the measuring unit.

- Importance safety notice :

Components identified by ⚠ mark have special characteristics important for safety. Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

Caution !

IC, LSI and VLSI are sensitive to static electricity.
Secondary trouble can be prevented by taking care during repair.

- Cover the parts boxes made of plastics with aluminium foil.
- Put a conductive mat on the work table.
- Ground the soldering iron.
- Do not touch the pins of IC, LSI or VLSI with fingers directly.

16.1. (A) CD Servo Circuit

16.2. (B) Main (Tuner) Circuit

16.3. (B) Main Circuit

16.4. (C) Panel Circuit

16.5. (D) Transformer Circuit, (E) CD Detect Circuit, (F) Spindle Position Circuit & (G) CD Loading Circuit

16.6. (H) Power Circuit

16.7. (I) Deck Circuit & (J) Deck Mechanism Circuit

17. Printed Circuit Board

Note: Circuit board diagrams may be modified at any time with the development of new technology.

17.1. (A) CD Servo P.C.B.

17.2. (B) Main P.C.B.

17.3. (C) Panel P.C.B.

17.4. (D) Transformer P.C.B.

17.5. (E) CD Detect P.C.B., (F) Spindle Position P.C.B., (G) CD Loading P.C.B. & (K) Tuner Pack P.C.B.

17.6. (H) Power P.C.B.

17.7. (I) Deck P.C.B. & (J) Deck Mechanism P.C.B.

18. Wiring Connection Diagram

19. Illustration of IC’s, Transistors and Diodes

20. Terminal Function of IC’s

20.1. IC7002 (MN6627953HB) Servo processor/ Digital signal processor/ Digital filter/ D/A converter

Pin No.	Mark	I/O	Function
1	EXT0	I/O	Extend input/output port 0
2	EXT1	I/O	Extend input/output port 1
3	EXT2	I/O	Extend input/output port 2
4	PWMSEL	I	PWM output selection input (L: Direct; H: Tri-State
5	SPOUT	O	Spindle driver output signal
6	SPPOL	O	Spindle driver output signal
7	TRVP	O	Spindle driver output signal
8	TRVM	O	Spindle driver output signal
9	TRVP2	O	Traverse driver output signal 2 (+)
10	TRVM2	O	Traverse driver output signal 2 (-)
11	TRP	O	Traverse driver output signal (+)
12	TRM	O	Traverse driver output signal (-)

Pin No.	Mark	I/O	Function
13	FOP	O	Traverse driver output signal (+)
14	FOM	O	Traverse driver output signal (-)
15	IOVDD3	-	I/O power supply 3
16	DVDD1	-	Power supply 1 for digital circuit
17	DVSS1	-	Digital circuit GND 1
18	ADPVCC	I	Power voltage monitor. Power voltage input
19	TEIN	I	DSP traverse error signal input
20	FEIN	I	DSP focus error signal input
21	CEA	I/O	HPF-Amp capacitance connection terminal
22	RFENV	O	RF envelope signal monitor
23	FEOUT	O	FE Amp output
24	FEN	I	FE Amp reversal input
25	TEN	I	TE Amp reversal input
26	TEOUT	O	TE Amp output
27	VREF	O	VREF output
28	PD	I	APC Amp input
29	LD	O	APC Amp output
30	E	I	Tracking input signal 1
31	F	I	Tracking input signal 2
32	D	I	Tracking input signal 4
33	B	I	Tracking input signal 2
34	C	I	Tracking input signal 3
35	A	I	Focus input signal 1
36	DCDET	I	Detection HPF capacitance terminal
37	RFVDD	-	RF Amp power supply
38	RESERVE	-	AVSS2
39	RFOUT	O	RF Amp output

Pin No.	Mark	I/O	Function
40	RFIN	I	AGC input
41	CAGC	I/O	AGC control terminal
42	ARFOUT	O	AGC output (Audio RF)
43	AVSS2	-	Analog circuit GND 2
44	ARFIN	I	RF signal input
45	DSLF	O	DSL loop filter
46	IREF	I	I (current), Reference input
47	PLLF	O	PLL loop filter
48	PLLF0	O	PLL loop filter
49	AVDD2	-	Analog circuit power supply 2
50	OUTL	O	LCH output signal
51	AVSS1	-	Audio output circuit GND 1
52	N.C.	-	No Connection
53	AVDD1	-	Power supply 1 for analog circuit
54	OUTR	O	RCH output signal
55	DVSS2	-	Digital circuit GND 2
56	IOVDD1	-	I/O power supply 1
57	DVDD2	-	Power supply 2 for Digital circuit
58	REGON	I	Laser diode control (H : ON)
59	IOMODE	I	I/O switching setting input
60	NTEST	I	Test mode setting input (H: ON)
61	TX	O	Digital audio interface output
62	FLAG	O	Flag signal output
63	MCLK	I	Micro-P serial command CLK
64	MDATA	I	Micro-P serial command DATA
65	MLD	I	Micro-P serial command LOAD
66	STAT	O	Status signal output
67	BLKCK	O	Subcode block clock
68	NRST	I	LSI reset input (L: RESET)
69	DVSS3	-	Digital circuit GND 3

Pin No.	Mark	I/O	Function
70	X2	O	Crystal oscillator circuit output
71	X1	I	Crystal oscillator circuit input
72	IOVDD2	I	I/O power supply 2
73	DQSY	O	Pack signal output for CD-Text data
74	TXTD	O	CDText signal output
75	TXTCK	I	External clock signal input for CD-Text register
76	GIO0	I/O	General purpose input /output Terminal 0
77	GIO1	I/O	General purpose input /output Terminal 1
78	GIO2	I/O	General purpose input /output Terminal 2
79	GOUT0	O	General purpose output Terminal 0
80	GOUT1	O	General purpose output Terminal 1

20.2. IC7003 (AN8739SBTE2) Focus coil/ Tracking coil/ Traverse motor/ Spindle motor drive

Pin No.	Mark	I/O	Function
1	/RST	O	RESET output terminal
2	N.C.	-	No Connection
3	IN2	I	Motor drive (2) input
4	PC2	I	Turntable motor drive signal (“L” :ON)
5	N.C.	-	No Connection
6	IN1	I	Motor driver (1) input
7	PVCC1	-	Power supply (1) for driver
8	PGND1	-	Ground connection (1) for driver
9	N.C.	-	No Connection
10	D1-	O	Motor driver (1) reverse-action output
11	D1+	O	Motor driver (1) forward-action output
12	D2-	O	Motor driver (2) reverse-action output

Pin No.	Mark	I/O	Function
13	D2+	O	Motor driver (2) forward-action output
14	D3-	O	Motor driver (3) reverse-action output
15	D3+	O	Crystal oscillating circuit input (f = 16.9344MHz)
16	D4-	O	Motor driver (4) reverse-action output
17	D4+	O	Motor driver (4) forward-action output
18	N.C.	-	No Connection
19	PGND2	-	Ground connection (2) for driver
20	PVCC2	-	Power supply (2) for driver
21	VCC	-	Power supply terminal
22	VREF	-	Reference voltage input
23	IN4	I	Motor driver (4) input
24	IN3	I	Motor driver (3) input
25	RSTIN	I	Reset terminal
26	N.C.	-	No Connection

20.3. IC2801 (C2CBJG000565) System Microprocessor

Pin No.	Mark	I/O	Function
1	LM_L	I	Level Meter Left
2	N.C.	-	No Connection
3	PLL_CE	O	PLL Chip Select
4	RDS_DAT	I	RDS Data Input
5	RDS_CLK	I	RDS Clock Input
6	N.C.	-	No Connection
7	N.C.	-	No Connection
8	BYTE	I	External Data Bus Width Select Input
9	CNVss/ EFP_CNVss	-	Flash Mode Terminal (Connect to ground)
10	Xcin	-	32.768 kHz Sub Clock
11	Xcout	-	32.768 kHz Sub Clock
12	/RESET/ EFP_RESET	I	Reset Input (ACTIVE L)
13	Xout	-	10 MHz Main Clock
14	Vss	-	Ground (0V)

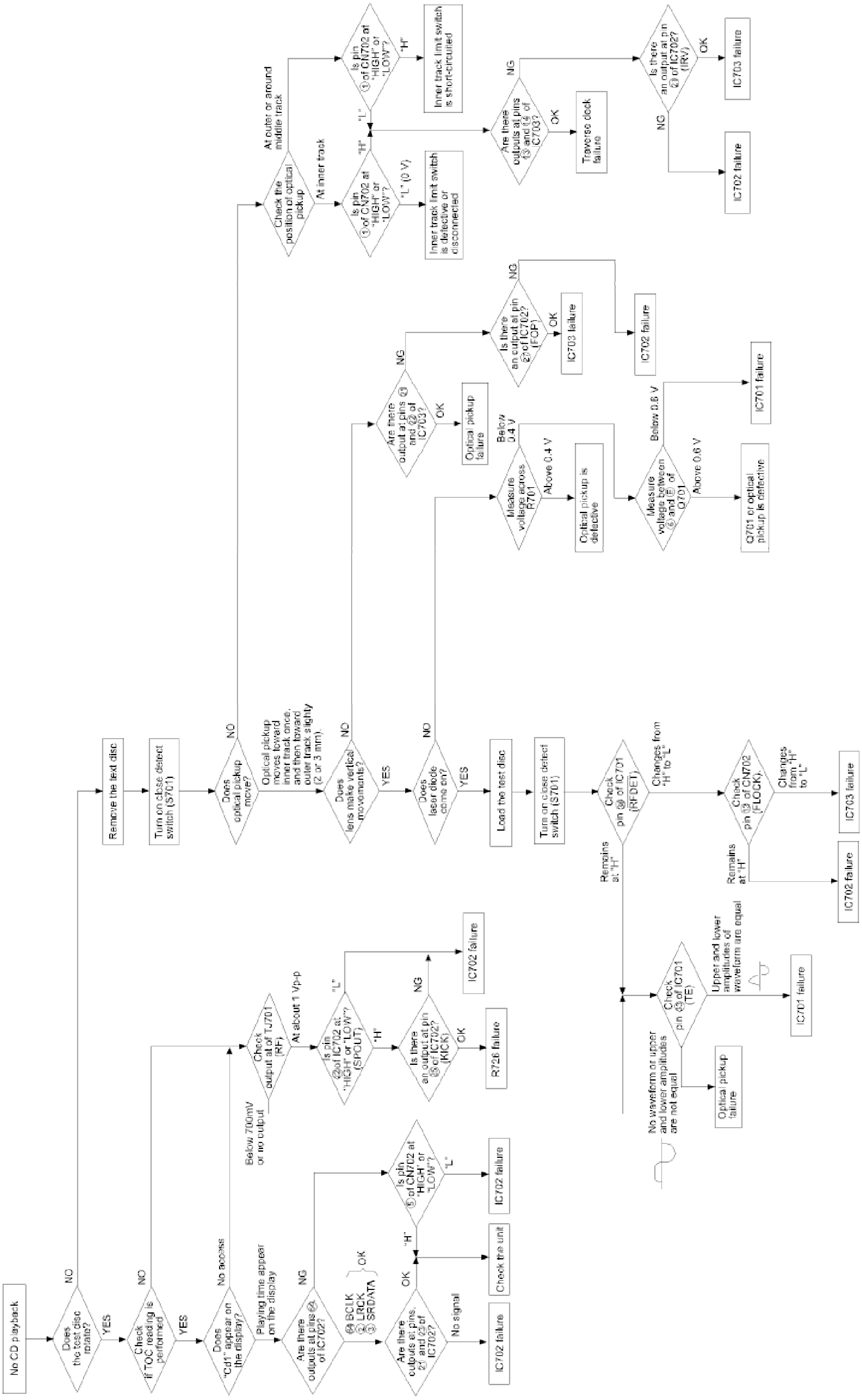
Pin No.	Mark	I/O	Function
15	Xin	-	10 MHz Main Clock
16	Vcc	-	Power Supply (+5V)
17	/NMI	-	Connect to Vcc (+5V)
18	RMT	I	Remote Control Input
19	BLKCK	I	CD Block Clock Input (Inverted)
20	SYNC	I	AC Failure Detect Input
21	ST/DO	I	Tuner IF Data/ Stereo Input
22	SD	I	Tuner Signal Detect Input
23	Harmonic_SW	I/O	*3 Harmonic Switch (Active L)
24	SW_LVL 1	O	*4 Sub-Woofer Level 1
25	SW_LVL 2	O	*4 Sub-Woofer Level 2
26	ASP_DAT	O	ASP Data
27	ASP_CLK	O	ASP Clock
28	N.C.	-	No Connection
29	PLL_DATA	O	PLL DATA
30	PLL_CLK	O	PLLCLK
31	REG 8/ EFP_RxD1	I	Region Setting 8 (Subwoofer)
32	REG 7/ EFP_RxD1	I	Region Setting 7 (MIC)
33	REG 6/ EFP_SCLK	I	Region Setting 6 (RDS)
34	REG 5/ EFP_BUSY	I	Region Setting 5 (Optical Out)
35	REG 4	I	Region Setting 4 (Deck Mechanism)
36	REG 3	I	Region Setting 3 (Tuner)
37	REG 2	I	Region Setting 2 (Tuner)
38	REG 1	I	Region Setting 1 (Tuner)
39	MUTE_H	O	HIC Mute
40	MUTE_A	O	Audio Mute
41	EE_CS/EFP_/EPM	O	EEPROM Chip Select
42	EE_CLK	O	EEPROM Clock
43	EE_DAT	I/O	EEPROM Data

Pin No.	Mark	I/O	Function
44	N.C.	-	No Connection
45	N.C.	-	No Connection
46	PCONT/EFP_/CE	O	Main Transformer Control Output
47	DCDET	I	DC Detect Input
48-51	N.C.	-	No Connection
52	HALF_1	I	Deck 1 Half Playback Input
53	MODE_1	I	Deck 1 Mode Playback Input
54	SW_LED	O	*2 Sub Woofer LED
55	N.C.	-	No Connection
56	PLG1	O	Deck 1 plunger control
57	PLG2	O	Deck 2 plunger control
58	MTR	I/O	Deck motor control (“L” for motor ON)
59	REC	I/O	L when record circuit is operating
60	DECK1_H	O	H when DECK 1 P/B head is selected
61	N.C.	-	No Connection
62	Vcc	-	Power Supply (+5V)
63	N.C.	-	No Connection
64	Vss	-	Ground (0V)
65-66	N.C.	-	No Connection
67	V_JOG_A	I	Volume Jog A
68	V_JOG_B	I	Volume Jog B
69	EX1_CLK	I/O	*1 I/O Expander Clock
70	EX1_DAT	I	*1 I/O Expander Data
71	/FL_RESET	O	Reset Input (ACTIVE L)
72	FL_CS	I/O	FL Driver Chip Select
73	FL_DOUT	O	Serial Data To FL Driver (Output)
74	FL_CLK	I/O	Serial Clock To FL Driver
75	N.C.	-	No Connection
76	SSEQ_LED	O	Super Sound EQ LED
77	CD_RST	O	CD Reset Output
78	STATUS	I	CD Servo LSI Status Input

Pin No.	Mark	I/O	Function
79	MLD	O	CD Command Load Output
80	MDATA_OUT	O	CD Command Data Output
81	MCLK	O	CD Command Clock Output
82	/RESTSW	I	CD Limit Switch Input for the Most Inner Point (Active Low)
83	CHG_HLF	O	Changer Half Drive Output
84	CHG_CW	O	Changer Motor Clockwise Output
85	CHG_CCW	O	Changer Motor Counterclockwise Output
86	CHG_SW1	I	CD Changer Switch 1 Input
87	CHG_SW2	I	CD Changer Switch 2 Input
88	CHG_PLR	O	Changer Plunger Output
89	CHG_AD2	I	Changer AD Detection Input (Position/Bottom)
90	CHG_AD1	I	Changer AD Detection Input (Open/Clamp)
91	DECK2	I	DECK CONDITION INPUT 2 (R_INHF/MODE2/HALF2)
92	KEY3	I	KEY3 INPUT
93	KEY2	I	KEY2 INPUT
94	KEY1	I	KEY1 INPUT
95	PHOTO_2	I	Rotation Detection Signal (Deck 2)
96	AVss	-	Analog Power Supply Input (Connect to GND)
97	PHOTO_1	I	Rotation Detection Signal (Deck 1)
98	VREF	-	Reference for A-D (5V)
99	AVcc	-	Analog Power Supply Input

Pin No.	Mark	I/O	Function
100	Demo Selector	I	(H= default demo on, L= default demo off.)

21. Troubleshooting Guide


No CD playback
Does the test disc rotate?
NO
YES
Remove the text disc
Turn on close detect switch (S701)
Check if TOC reading is performed
NO
YES
Does "Cd1" appear on the display?
No access
Playing time appear on the display
Below 700mV or no output
Check output at of TJ701 (RF)
At about 1 Vp-p
Are there outputs at pins ㊹ of IC702?
NG
㊹ BCLK
② LRCK
③ SRDATA
OK
Are there outputs at pins, ㉑ and ㉓ of IC702?
OK
No signal
"H"
Is pin ⑤ of CN702 at "HIGH" or "LOW"?
"L"
IC702 failure
Check the unit
IC702 failure
Is pin ㉒ of IC702 at "HIGH" or "LOW"? (SPOUT)
"L"
"H"
Is there an output at pin ㉕ of IC702? (KICK)
NG
OK
R726 failure
IC702 failure
Does optical pickup move?
NO
Optical pickup moves toward inner track once, and then toward outer track slighty (2 or 3 mm).
Does lens make vertical movements?
NO
YES
Does laser diode come on?
NO
YES
Load the test disc
Turn on close detect switch (S701)
Check pin ㉞ of IC701 (RFDET)
Remains at "H"
Changes from "H" to "L"
Check pin ⑬ of CN702 (FLOCK).
Remains at "H"
Changes from "H" to "L"
IC702 failure
IC703 failure
Check pin ㊸ of IC701 (TE)
No waveform or upper and lower amplitudes are not equal
Upper and lower amplitudes of waveform are equal
Optical pickup failure
IC701 failure
Are there output at pins ㉑ and ㉒ of IC703?
NG
OK
Optical pickup failure
Measure voltage across R701
Below 0.4 V
Above 0.4 V
Optical pickup is defective
Measure voltage between ⑥ and Ⓔ of Q701
Below 0.6 V
Above 0.6 V
Q701 or optical pickup is defective
IC701 failure
Is there an output at pin ㉗ of IC702? (FOP)
NG
OK
IC703 failure
IC702 failure
Check the position of optical pickup
At outer or around middle track
At inner track
Is pin ① of CN702 at "HIGH" or "LOW"?
"L" (0 V)
"H"
Inner track limit switch is defective or disconnected
Is pin ① of CN702 at "HIGH" or "LOW"?
"L"
"H"
Inner track limit switch is short-circuited
Are there outputs at pins ⑬ and ⑭ of IC703?
NG
OK
Traverse deck failure
Is there an output at pin ② of IC702? (IRV)
NG
OK
IC702 failure
IC703 failure

22. Parts Location and Replacement Parts List

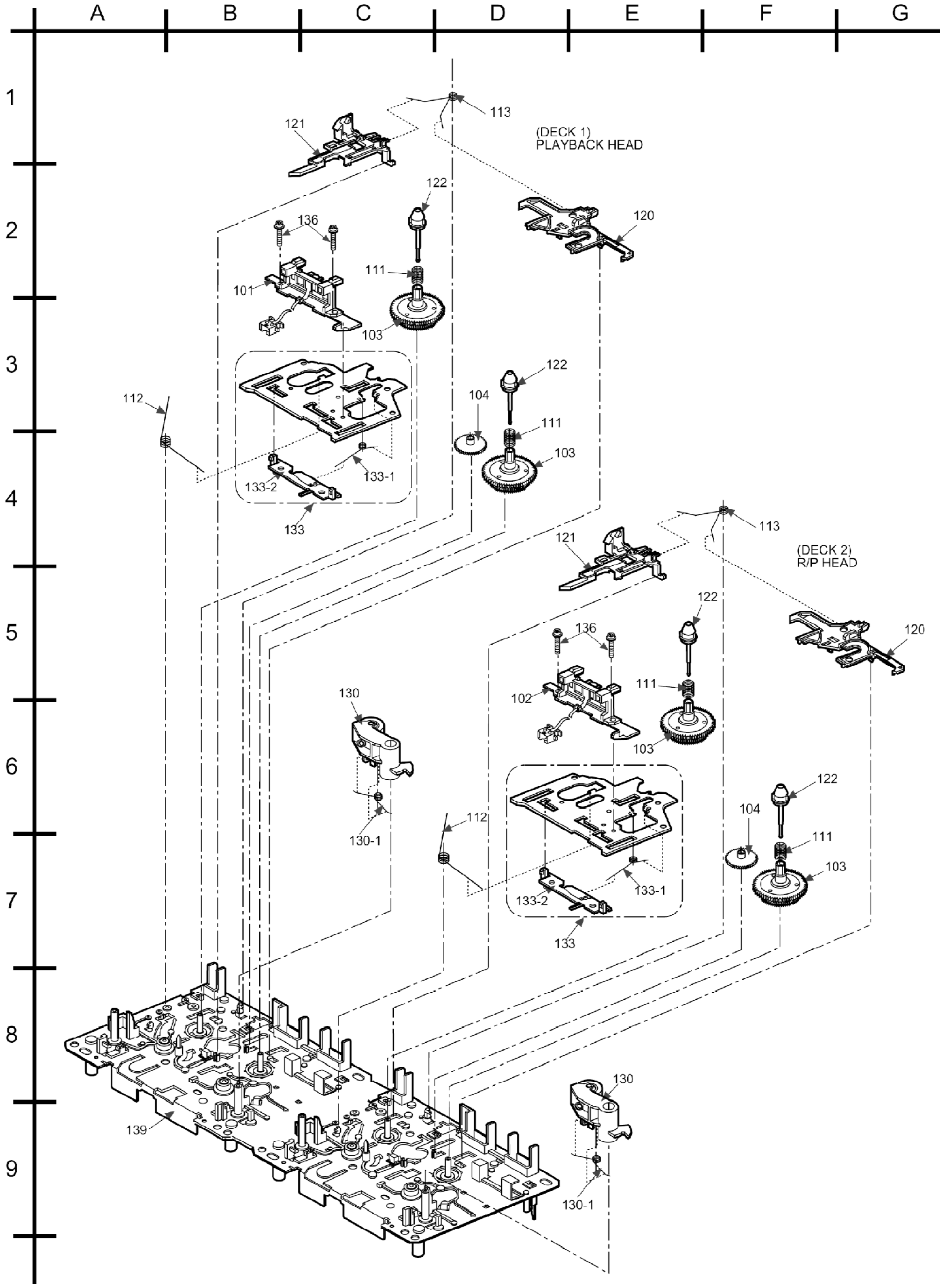
Notes:

- **Important safety notice:**
  Components identified by ⚠ mark have special characteristics important for safety.
  Furthermore, special parts which have purposes of fire-retardent (resistors), high-quality sound (capacitors), low noise (resistors), etc are used.
  When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.
- **The parenthesized indications in the Remarks columns specify the areas or colour. (Refer to the cover page for area or colour)**
  Parts without these indications can be used for all areas.
- **Warning: This product uses a laser diode. Refer to caution statements on "Precaution of Laser Diode".**
- **Capacitor values are in microfarads (µ F) unless specified otherwise, P= Pico-farads (pF), F= Farads.**
- **Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM).**
- **The marking (RTL) indicates that the Retention Time is limited for this items. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time. The retention period of a availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.**
- **[M] Indicates in the Remarks columns indicates parts supplied by PAVCSG.**
- **The "(SF)" mark denotes the standard part.**
- **Reference for O/I book languages are as follows:**

Ar:	**Arabic**	**Du:**	**Dutch**	**It:**	**Italian**	**Sp**	**Spanish**
Cf:	**Canadian French**	**En:**	**English**	**Ko:**	**Korean**	**Sw:**	**Swedis**
Cz:	**Czech**	**Fr:**	**French**	**Po:**	**Polish**	**Co:**	**Traditio Chinese**
Da:	**Danish**	**Ge:**	**German**	**Ru:**	**Russian**	**Cn:**	**Simplifi Chinese**
Pe:	**Persian**	**Ur:**	**Ukraine**				

22.1. Deck Mechanism (RAA4502-S)

22.1.1. Deck Mechanism Parts Location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(DECK 1)
PLAYBACK HEAD
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103
133-1
133-2
133
113
121
(DECK 2)
R/P HEAD
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120
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102
111
103
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130-1
112
122
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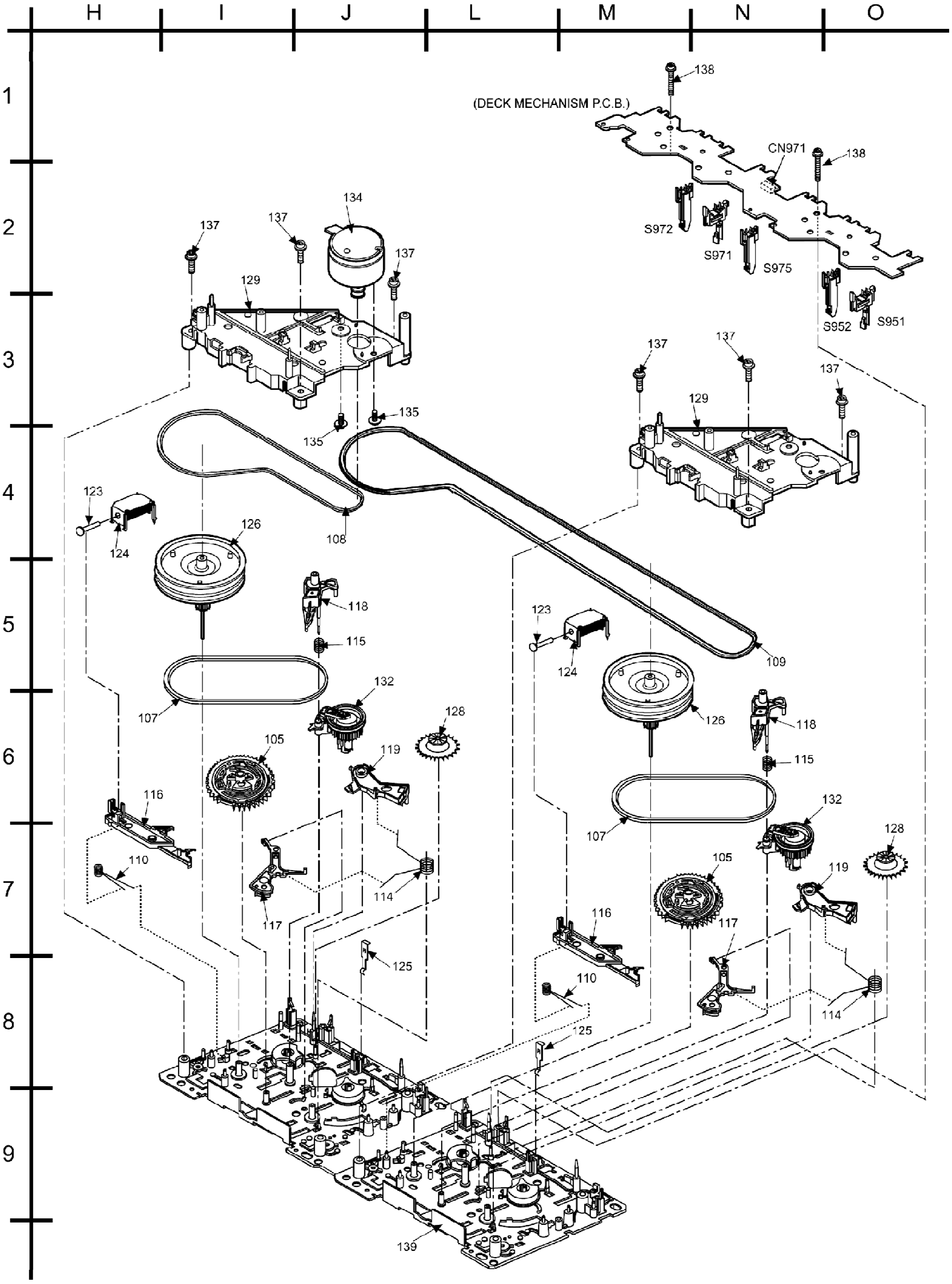
133-1
133-2
133
130
139
130-1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138
(DECK MECHANISM P.C.B.)
CN971
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S972
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S975
S952
S951
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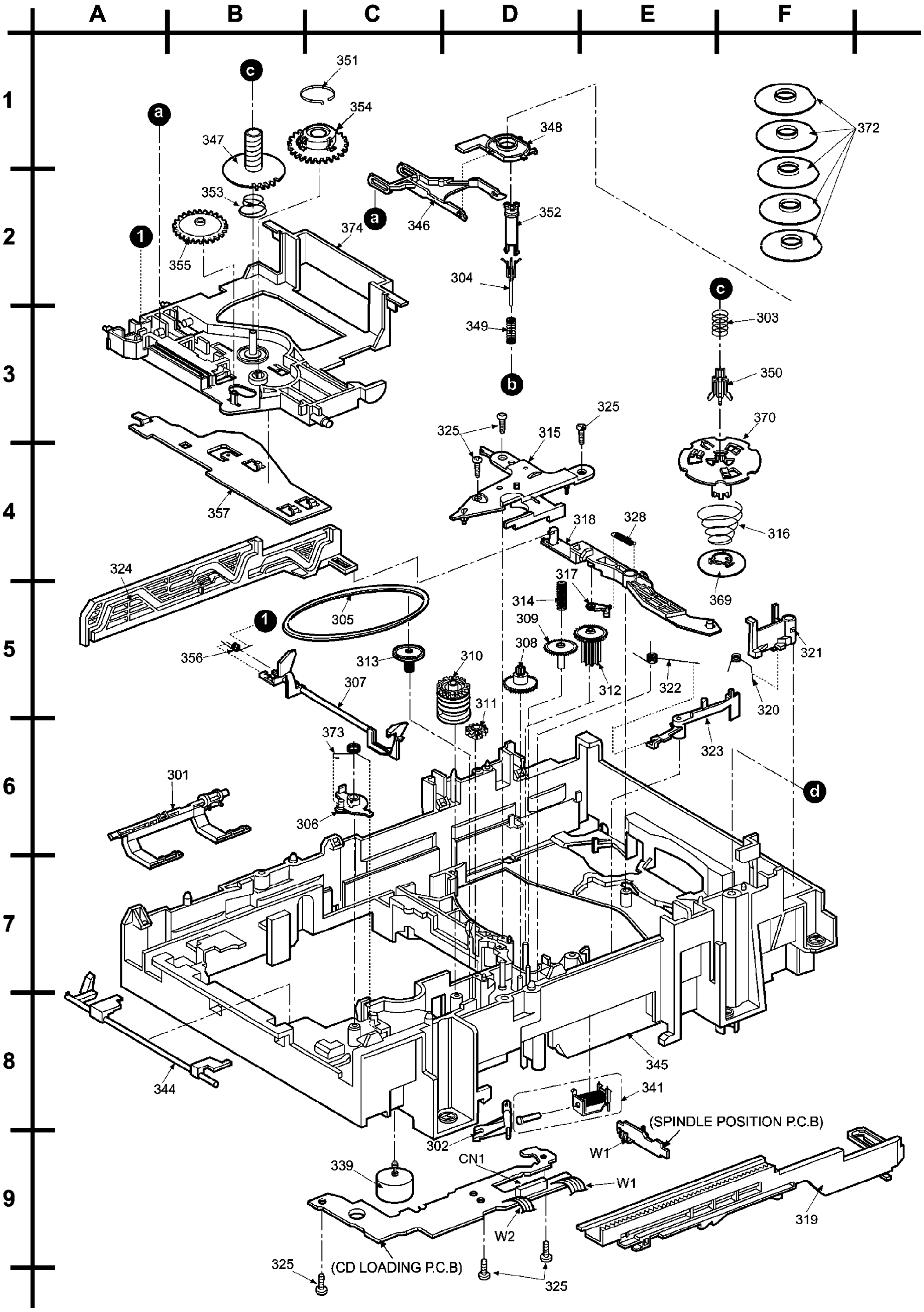
22.1.2. Deck Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CASSETTE DECK	
101	RED0069	R/P HEAD BLOCK UNIT	[M]
102	RED0070	P/B HEAD BLOCK UNIT	[M]
103	RDG0300	REEL BASE GEAR	[M]
104	RDG0301	WINDING RELAY GEAR	[M]
105	RDK0026	MAIN GEAR	[M]
107	RDV0033-4	WINDING BELT	[M]
108	RDV0064	CAPSTAN BELT A	[M]
109	RDV0071	CAPSTAN BELT B	[M]
110	RMB0312	TRIGGER LEVER SPRING	[M]
111	RMB0400	REEL SPRING	[M]
112	RMB0403	HEAD PANEL SPRING	[M]
113	RMB0404	BRAKE ROD SPRING	[M]
114	RMB0406	FR LEVER SPRING	[M]
115	RMB0408	THRUST SPRING	[M]
116	RML0370	TRIGGER LEVER	[M]
117	RML0371	FR LEVER	[M]
118	RML0372	WINDING LEVER	[M]
119	RML0374	EJECT LEVER	[M]
120	RMM0131	BRAKE ROD	[M]
121	RMM0133	EJECT ROD	[M]
122	RMQ0519	REEL HUB	[M]
123	RMS0398-1	MOVING CORE	[M]
124	RSJ0003	PLUNGER ASS'Y	[M]
125	RMC0061	PACK SPRING	[M]
126	RXF0061	FLYWHEEL F ASS'Y	[M]
128	RXG0040	FF RELAY GEAR ASS'Y	[M]
129	RMK0283A-J	SUB-CHASSIS	[M]
130	RXL0124	PINCH ROLLER F ASS'Y	[M]
130-1	RMB0401	PINCH ARM SPRING F	[M]
132	RXL0126	WINDING ARM ASS'Y	[M]
133	RXQ0412	HEAD PANEL ASS'Y	[M]
133-1	RMB0405	FR ROD SPRING	[M]
133-2	RMM0132	FR ROD	[M]
134	REM0121	CAP MOTOR ASS'Y	[M]
135	RHD26022	MOTOR SCREW	[M]
136	XTW2+5L	HEAD BLOCK UNIT SCREW	[M]
137	XTW26+10S	SUB-CHASSIS SCREW	[M]
138	XYC2+JF17	PCB EARTH SCREW	[M]
139	RFKJAA4501-S	CHASSIS ASS'Y	[M]

22.2. CD Loading Mechanism (RD-DAC026-S)

22.2.1. CD Loading Mechanism Parts Location



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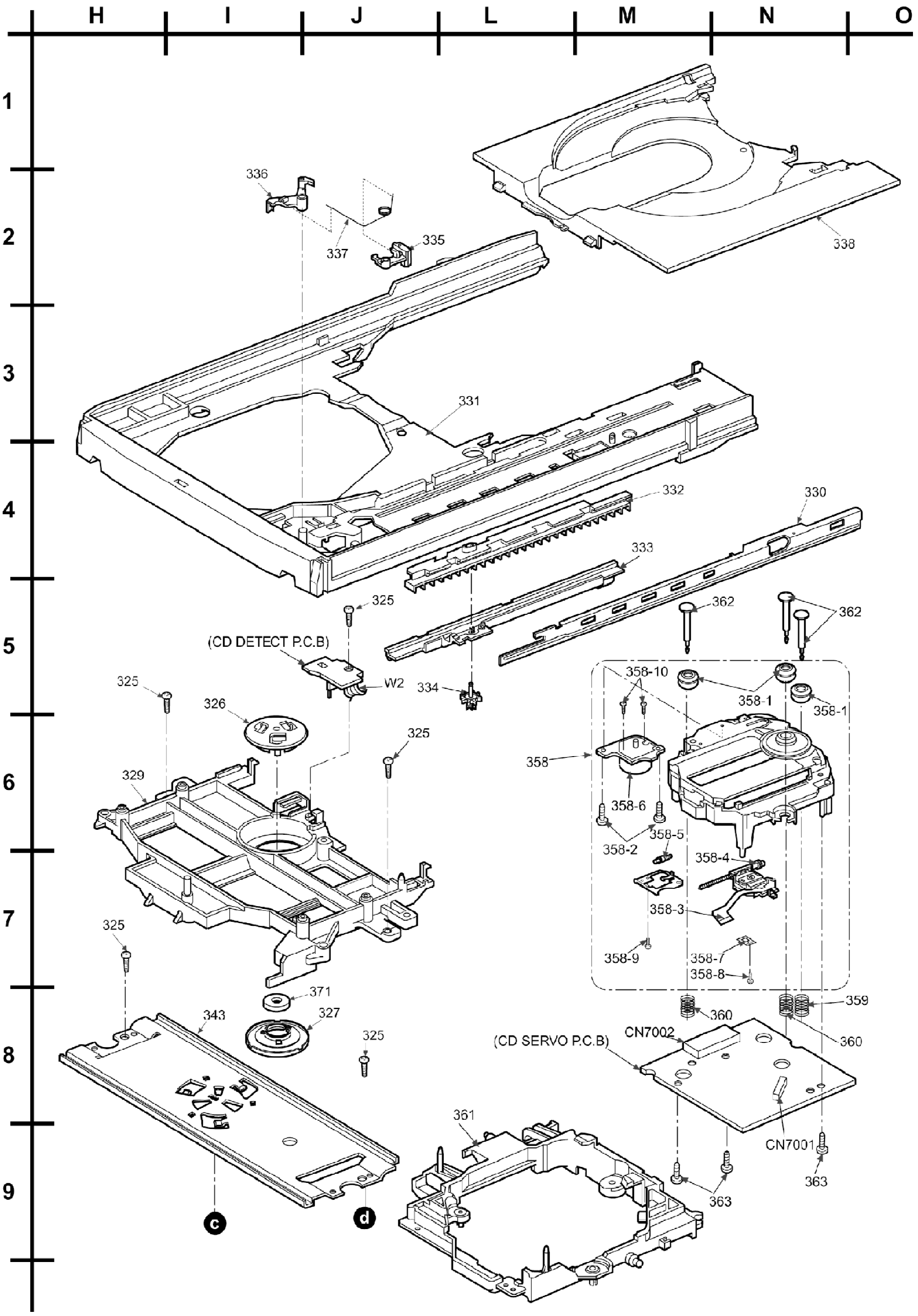
(SPINDLE POSITION P.C.B)
W1
CN1
W1
W2
(CD LOADING P.C.B)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(CD DETECT P.C.B)
W2
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358-10
358-1
358-1
325
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358-6
358-5
358-2
358-4
358-3
325
358-9
358-7
358-8
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371
360
343
327
325
(CD SERVO P.C.B)
CN7002
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361
CN7001
363
363
c
d

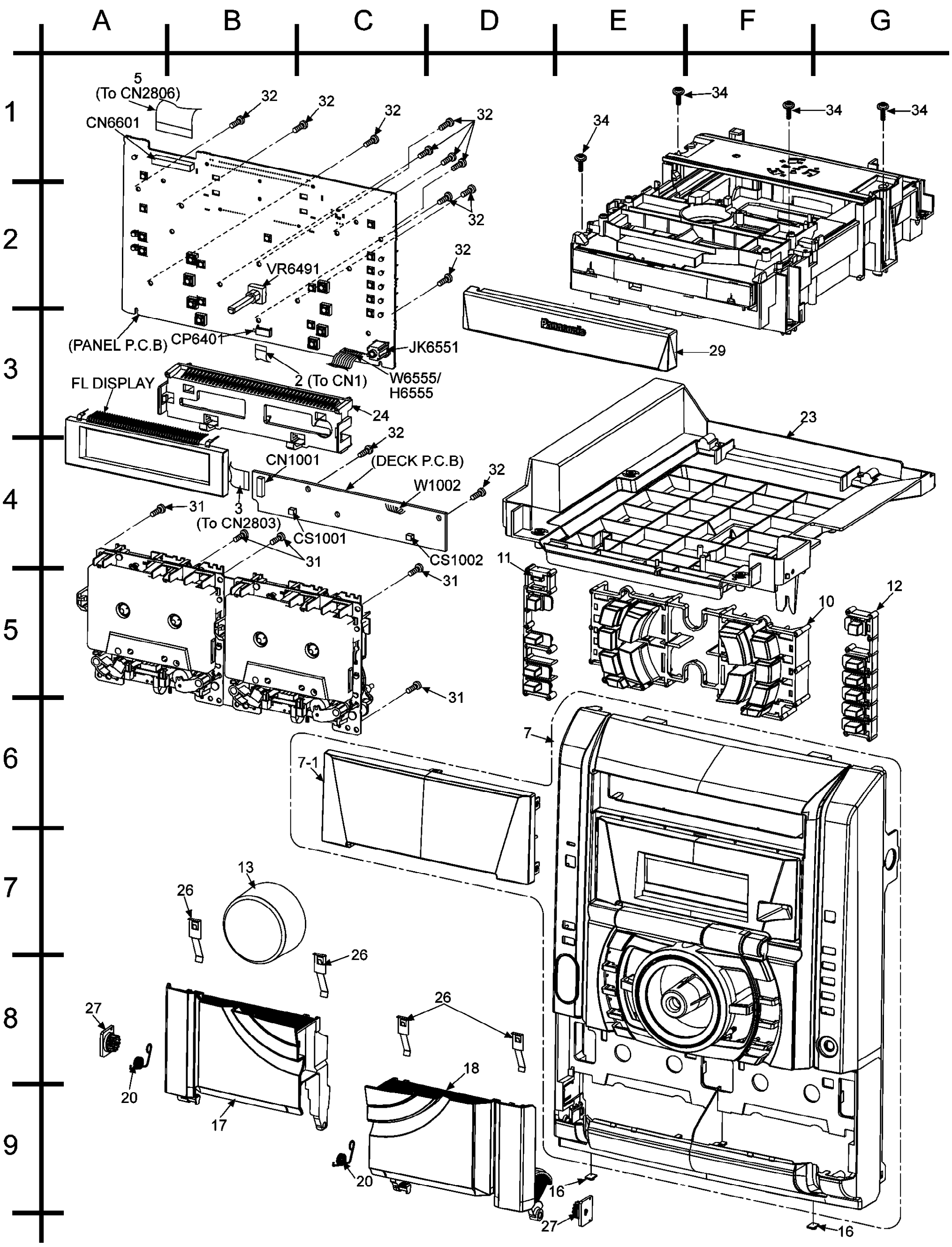
22.2.2. CD Loading Mechanism Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		TRAVERSE DECK	
301	RML0517	TIMING LEVER	[M]
302	RML0516	PLUNGER LEVER	[M]
303	RMB0551	UPPER SPINDLE SPRING	[M]
304	RMQ0744	LOWER HOOK	[M]
305	RDV0056	BELT	[M]
306	RML0525	FRONT LOCK LEVER	[M]
307	RML0526	DISC LEVER	[M]
308	RDG0424	DRIVE GEAR	[M]
309	RDG0425	CHANGE GEAR	[M]
310	RDG0427	TRAVERSE CAM GEAR	[M]
311	RDG0428	TRAVERSE RELAY GEAR	[M]
312	RDG0426	UP/DOWN GEAR	[M]
313	RDG0429	PULLEY GEAR	[M]
314	RMB0549-1	CHANGE GEAR SPRING	[M]
315	RMQ0748	PITCH PLATE	[M]
316	RMB0553	PUSH SPRING	[M]
317	RML0530	ASSIST LEVER	[M]
318	RML0518	CONNECTION LEVER	[M]
319	RMM0201	SLIDE PLATE 1	[M]
320	RME0258	REAR LOCK SPRING	[M]
321	RML0521	REAR LOCK	[M]
322	RME0257	TRAY LOCK LEVER SPRING	[M]
323	RML0520	TRAY LOCK	[M]
324	RMM0202	SLIDE PLATE 2	[M]
325	XTB3+10J	SCREW	[M]
326	RMR0334	FIXED PLATE	[M]
327	RMR0624-W2	CLAMPER	[M]
328	RMB0561	ASSIST LEVER SPRING	[M]
329	RMR1121-K	MECHA COVER	[M]
330	RMA1110-2	TRAY ANGLE	[M]
331	RMR1122-H1	TRAY BASE	[M]
332	RMM0204	CARRIER	[M]
333	RMM0203	DRIVE RACK	[M]
334	RDG0432	SPEED UP GEAR	[M]
335	RML0524	SLIDE LOCK	[M]
336	RML0523	CARRIER LOCK	[M]
337	RME0260-1	SLIDE LOCK SPRING	[M]
338	RMR1123-H	TRAY	[M]
339	RXQ0595	MOTOR SUB ASS’Y	[M]
341	RSJ0003	SOLENOID ASS’Y	[M]
343	RMA1106	UPPER PLATE	[M]
344	RML0519	CD LEVER	[M]
345	RFKNAAK27GCS	MECHA BASE ASS’Y	[M]
346	RML0522	TURNING STOPPER	[M]
347	RMQ0745	LOWER SPINDLE	[M]
348	RMQ0746	UP/DOWN BASE	[M]
349	RMB0550	LOWER SPINDLE SPRING	[M]
350	RMQ0747	UPPER HOOK	[M]
351	RME0263	CLICK SPRING	[M]
352	RMQ0743	SPINDLE SHAFT	[M]
353	RMB0552	CUSHION SPRING	[M]
354	RDG0430	RELAY GEAR ‘A’	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
355	RDG0431	RELAY GEAR ‘B’	[M]
356	RME0262	DISK LEVER SPRING	[M]
357	RMA1105	SUPPORT PLATE	[M]
358	RAE0153Z-3S	TRAVERSE	[M]
358-1	SHGD113-1	FLOATING CUSHION	[M]
358-2	SNSD38	TRV MOTOR ASSY SCREW	[M]
358-3	RAF0152A-S	CD OPU	[M]
358-4	RDG0247	DRIVE GEAR	[M]
358-5	RDG0248	RELAY GEAR	[M]
358-6	RXQ0339	TRAVERSE MOTOR ASS’Y	[M]
358-7	RXQ0304-1	NUT PLATE ASS’Y	[M]
358-8	XQN17+CG5	NUT PLATE ASSY SCREW	[M]
358-9	XQS2+A3FZ	SPINDLE MOTOR SCREW	[M]
358-10	XQS17+A35FZ	TRAVERSE MOTOR SCREW	[M]
359	RME0142	FLOATING SPRING A	[M]
360	RME0109	FLOATING SPRING B	[M]
361	RMR1124A-X	CD TRAVERSE CHASSIS	[M]
362	RMS0632	TRAVERSE PIN	[M]
363	XTN2+6G	SCREW	[M]
369	RMX0141	PUSH SPACER	[M]
370	RMQ0749	UPPER SPINDLE	[M]
371	RHM0001	MAGNET	[M]
372	RMX0140	DISC SPACER	[M]
373	RME0261	FRONT LOCK SPRING	[M]
374	RMQ0742	SPINDLE BASE	[M]

22.3. Cabinet

22.3.1. Cabinet Parts Location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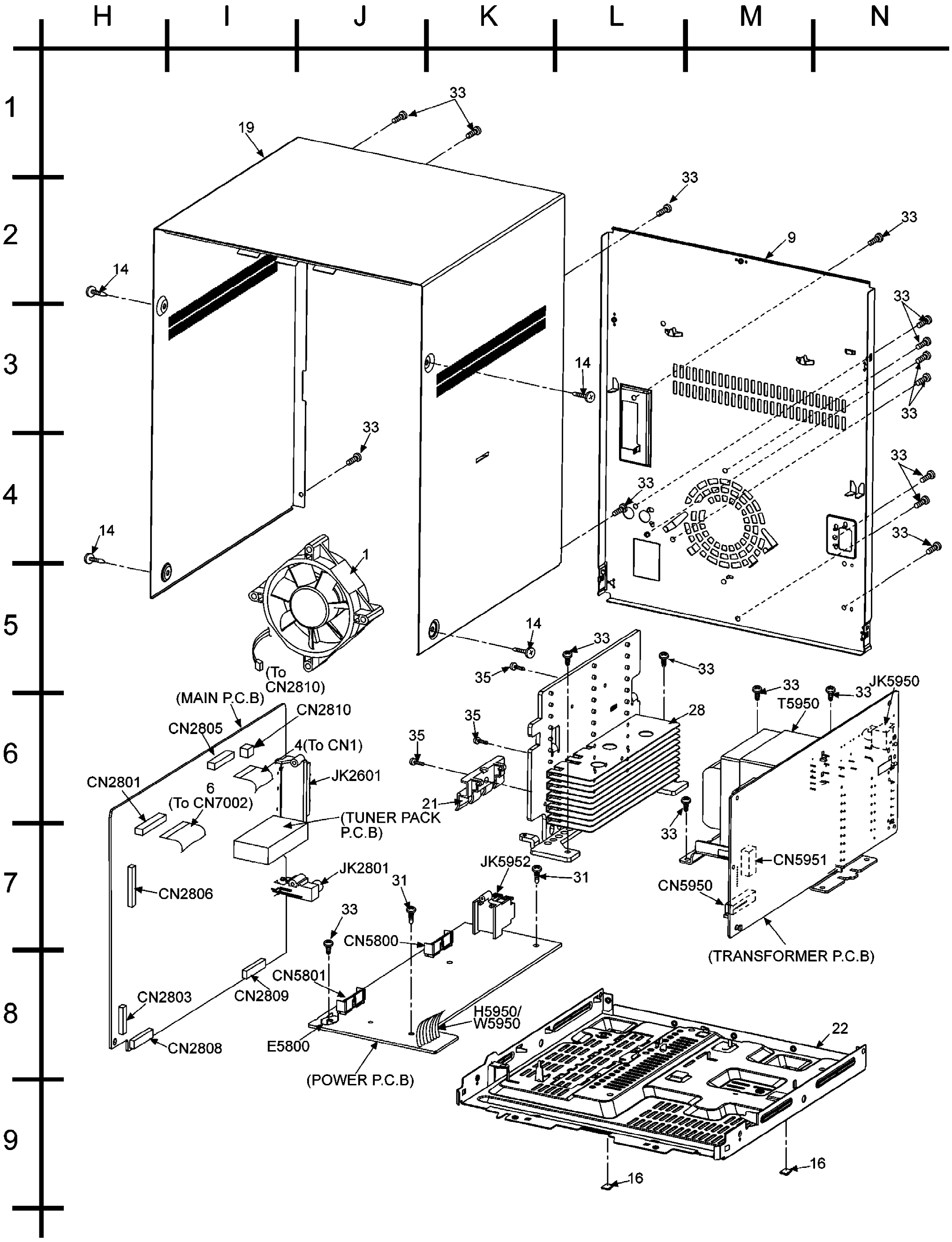
(To CN2806)
CN6601
VR6491
(PANEL P.C.B)
CP6401
JK6551
2 (To CN1)
W6555/
H6555
FL DISPLAY
CN1001
(DECK P.C.B)
W1002
(To CN2803)
CS1001
CS1002
7-1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(To CN2810)
(MAIN P.C.B)
CN2810
CN2805
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28
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T5950
33
JK5950
CN2801
JK2601
6 (To CN7002)
21
(TUNER PACK P.C.B)
33
JK2801
JK5952
31
31
CN5951
CN5950
CN2806
33
CN5800
CN5801
CN2809
CN2803
H5950/ W5950
E5800
CN2808
(POWER P.C.B)
(TRANSFORMER P.C.B)
22
16
16

22.3.2. Cabinet Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		CABINET AND CHASSIS	
1	L6FALEFH0030	FAN	[M]
2	REEX0202	10P FFC (PANEL)	[M]
3	REEX0211	14P FFC WIRE (DECK)	[M]
4	REEX0212	14P FFC WIRE (CD)	[M]
5	REEX0401	30P FFC (PANEL)	[M]
6	REEX0447	16P FFC WIRE	[M]
7	RFKGAAK230GC	FRONT PANEL ASS'Y	[M]
7-1	RKWX0239A-H	FL WINDOW	[M]
9	RGRX0042G-DA	REAR PANEL	[M]
10	RGUX0593-SJ	FUNCTION BUTTON	[M]
11	RGUX0594-S	POWER/SSEQ BUTTON	[M]
12	RGUX0595-S	CD EJECT BTN/CONTROL	[M]
13	RGWX0088-S	VOLUME KNOB	[M]
14	RHD30004-2S	SCREW	[M]
16	RKA0072-KJ	LEG CUSHION	[M]
17	RKFX0125-S1J	CASS LID (L)	[M]
18	RKFX0126-S1J	CASS LID (R)	[M]
19	RKMX0105-S	TOP CABINET	[M]
20	RMBX0036	CASS OPEN SPRING	[M]
21	RMCX0021	TRANSISTOR CLIP	[M]
22	RMKX0099-2	BOTTOM CHASSIS	[M]
23	RMKX0100	CD CHASSIS	[M]
24	RMNX0119-K	FL HOLDER	[M]
26	RUS757ZAA	CASS HALF SPRING	[M]
27	RXGX0002	DAMPER GEAR	[M]
28	RXXX0057A	HEAT SINK UNIT	[M]
29	RYFX0138C-K1	CD LID UNIT	[M]
31	XTB3+10JFJ	SCREW	[M]
32	RHD26046	SCREW	[M]
33	RHD30119	SCREW	[M]
34	XTW3+12TFJ	SCREW	[M]
35	XTW3+15TFJ	SCREW	[M]

22.4. Electrical Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PRINTED CIRCUIT BOARD	
	REPX0443A	CD SERVO P.C.B.	[M](RTL)
	REPX0442R	MAIN P.C.B.	[M](RTL)
	REPX0441C	PANEL P.C.B.	[M](RTL)
	REPX0468C	TRANSFORMER P.C.B.	[M](RTL)
	REP2578A-N	CD LOADING P.C.B.	[M](RTL)
	REP2578A-N	CD DETECT P.C.B.	[M](RTL)
	REP2578A-N	SPINDLE POSITION P.C.B.	[M](RTL)
	REP1999B	TUNER PACK P.C.B.	[M](RTL)
	REPX0469H	POWER P.C.B.	[M](RTL)
	REPX0331D	DECK P.C.B.	[M](RTL)
	REPX0321A	DECK MECHANISM P.C.B.	[M](RTL)
		INTEGRATED CIRCUITS	
IC1	C0GAM0000005	IC MOTOR DRIVE	[M]
IC951	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC971	CNB13030R2AU	IC PHOTO INTERRUPTER	[M]
IC1001	AN7348S-E1	IC P.B. EQ/REC AMP/ALC/TPS AMP	[M]
IC1004	C1AA00000612	IC R/P SELECT	[M]
IC2601	LA1833NMNTLM	IC FM/AM IF AMP/DET/AM OSC MIX/FM MPX	[M]
IC2602	LC72131MDTRM	IC PLL FREQUENCY SYNTHESIZER	[M]
IC2801	C2CBJG000565	IC MICROPROCESSOR	[M]
IC2803	C1BB00000732	IC AUDIO SOUND PROCESSOR	[M]
IC2804	C0AABA000009	IC DUAL OP-AMP	[M]
IC5802	RSN35H2B-P	IC POWER HIC	[M]
IC6601	C0HBB0000044	IC FL DRIVER	[M]
IC7002	MN6627953HB	IC SERVO PROCESSOR/DIGITAL SIGNAL PROCESSOR/ DIGITAL FILTER/D/A CONVERTER	[M]
IC7003	AN8739SBTE2	IC FOCUS COIL/TRACKING COIL/TRACKING COIL/ TRAVERSE MOTOR/SPINDLE MOTOR DRIVE	[M]
		TRANSISTORS	
Q1	2SK544F-AC	TRANSISTOR	[M]
Q1	B1GACFGG0004	TRANSISTOR	[M]
Q2	B1AAAC000016	TRANSISTOR	[M]
Q3	B1AAAD000015	TRANSISTOR	[M]
Q4	B1AAAD000015	TRANSISTOR	[M]
Q1003	B1AAGC000007	TRANSISTOR	[M]
Q1004	B1AAGC000007	TRANSISTOR	[M]
Q1005	B1AAGC000007	TRANSISTOR	[M]
Q1007	B1ABCE000016	TRANSISTOR	[M]
Q1017	B1AARC000002	TRANSISTOR	[M]
Q2501	B1GDCFJJ0023	TRANSISTOR	[M]
Q2571	B1GFGCAA0001	TRANSISTOR	[M]
Q2601	B1AABC000003	TRANSISTOR	[M]
Q2606	B1GCCFJJ0015	TRANSISTOR	[M]
Q2701	2SD0592ARA	TRANSISTOR	[M]
Q2704	2SB0709AHL	TRANSISTOR	[M]
Q2705	2SB0709AHL	TRANSISTOR	[M]
Q2706	2SD0601AHL	TRANSISTOR	[M]
Q2806	B1GBCFJJ0051	TRANSISTOR	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
Q2901	B1ACKD000005	TRANSISTOR	[M]
Q2902	B1AACF000064	TRANSISTOR	[M]
Q2906	B1ABCE000016	TRANSISTOR	[M]
Q2907	B1ABCE000016	TRANSISTOR	[M]
Q2936	B1ACKD000005	TRANSISTOR	[M]
Q2937	B1GBCFJJ0051	TRANSISTOR	[M]
Q2978	B1GDCFJJ0023	TRANSISTOR	[M]
Q2980	B1GDCFJJ0023	TRANSISTOR	[M]
Q5801	B1BACG000023	TRANSISTOR	[M]
Q5802	B1BCCG000002	TRANSISTOR	[M]
Q5803	B1BACG000023	TRANSISTOR	[M]
Q5804	B1BCCG000002	TRANSISTOR	[M]
Q5805	B1ACCF000063	TRANSISTOR	[M]
Q5806	B1GCCFGA0005	TRANSISTOR	[M]
Q5807	B1AACF000064	TRANSISTOR	[M]
Q5808	B1AAKD000009	TRANSISTOR	[M]
Q5812	B1AACF000064	TRANSISTOR	[M]
Q5813	B1AACF000064	TRANSISTOR	[M]
Q5814	B1AACF000064	TRANSISTOR	[M]
Q5950	B1BACD000017	TRANSISTOR	[M]
Q5951	2SB0621AHA	TRANSISTOR	[M]
Q5952	B1GACFJJ0016	TRANSISTOR	[M]
Q5953	B1AACF000064	TRANSISTOR	[M]
Q6411	B1ACKD000005	TRANSISTOR	[M]
Q6415	B1ACKD000005	TRANSISTOR	[M]
Q6421	B1GACFLL0007	TRANSISTOR	[M]
Q6425	B1GACFLL0007	TRANSISTOR	[M]
Q6457	B1GACFLL0007	TRANSISTOR	[M]
Q7601	B1ADCF000001	TRANSISTOR	[M]
		DIODES	
D1	B0CBAD000004	DIODE	[M]
D1	B3NAA0000096	PHOTO INTERRUPTOR	[M]
D2	B0BA4R600003	DIODE	[M]
D2	B0CBAD000004	DIODE	[M]
D3	B0CBAD000004	DIODE	[M]
D951	MA2C16500E	DIODE	[M]
D971	MA2C16500E	DIODE	[M]
D1003	B0ACCK000005	DIODE	[M]
D1004	B0BC3R700004	DIODE	[M]
D2601	B0BC5R000009	DIODE	[M]
D2602	B0CDBB000015	DIODE	[M]
D2703	B0ACCK000005	DIODE	[M]
D2704	B0ACCK000005	DIODE	[M]
D2705	B0ACCK000005	DIODE	[M]
D2802	B0ADCJ000020	DIODE	[M]
D2804	B0ACCK000005	DIODE	[M]
D2811	B0ADCJ000020	DIODE	[M]
D2813	B0ACCK000005	DIODE	[M]
D2901	B0ADCC000002	DIODE	[M]
D2904	B0EAKM000117	DIODE	[M]
D2936	B0EAKM000117	DIODE	[M]
D2951	B0BC7R500001	DIODE	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
D5801	B0BA9R600002	DIODE	[M]
D5802	B0BA01500003	DIODE	[M]
D5803	B0BA01500003	DIODE	[M]
D5804	B0AACK000004	DIODE	[M]
D5805	B0EAKM000117	DIODE	[M]
D5807	B0EAKM000117	DIODE	[M]
D5808	B0BA5R600016	DIODE	[M]
D5809	B0BA9R600002	DIODE	[M]
D5813	B0AACK000004	DIODE	[M]
D5814	B0AACK000004	DIODE	[M]
D5950	B0EAMM000038	DIODE	[M]
D5951	B0EAMM000038	DIODE	[M]
D5952	B0EAMM000038	DIODE	[M]
D5953	B0EAMM000038	DIODE	[M]
D5954	B0EAKM000117	DIODE	[M]
D5955	B0EAKM000117	DIODE	[M]
D5956	B0EAKM000117	DIODE	[M]
D5957	B0EAKM000117	DIODE	[M]
D5958	B0EAKM000117	DIODE	[M]
D5959	B0EAKM000117	DIODE	[M]
D5960	MAZ42700LF	DIODE	[M]
D5961	B0EAKM000117	DIODE	[M]
D5962	B0EAKM000117	DIODE	[M]
D5963	B0EAKM000117	DIODE	[M]
D5964	B0BA6R600008	DIODE	[M]
D5965	B0AACK000004	DIODE	[M]
D5966	B0EAKM000117	DIODE	[M]
D6457	B3AAA0000583	DIODE	[M]
D6458	B3AAA0000583	DIODE	[M]
D6635	B0BA5R600016	DIODE	[M]
		VARIABLE RESISTORS	
VR6491	EVEKE2F3524M	VOLUME JOG	[M]
		SWITCHES	
S951	K0J1BB000017	SW MODE	[M]
S952	RSH1A019-2U	SW HALF	[M]
S971	K0J1BB000017	SW MODE	[M]
S972	RSH1A019-2U	SW HALF	[M]
S975	RSH1A019-2U	SW RECINH_F	[M]
S6101	EVQ21405R	SW OPEN/CLOSE	[M]
S6102	EVQ21405R	SW CD 1	[M]
S6103	EVQ21405R	SW CD 2	[M]
S6104	EVQ21405R	SW CD 3	[M]
S6105	EVQ21405R	SW CD 4	[M]
S6106	EVQ21405R	SW CD 5	[M]
S6201	EVQ21405R	SW REW/DOWN	[M]
S6202	EVQ21405R	SW TUNER	[M]
S6203	EVQ21405R	SW CD	[M]
S6204	EVQ21405R	SW FF/UP	[M]
S6205	EVQ21405R	SW STOP	[M]
S6206	EVQ21405R	SW DECK 1/2	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
S6207	EVQ21405R	SW DECK 2	[M]
S6208	EVQ21405R	SW TAPE	[M]
S6209	EVQ21405R	SW AUX	[M]
S6210	EVQ21405R	SW DECK 1	[M]
S6301	EVQ21405R	SW POWER	[M]
S6303	EVQ21405R	SW SSEQ	[M]
S6304	EVQ21405R	SW REC	[M]
S6305	EVQ21405R	SW DEMO/DISPLAY	[M]
S7201	RSH1A043-U	SW REST	[M]
SW1	RSH1A032-U	SW PUSH	[M]
SW2	RSH1A032-U	SW PUSH	[M]
SW3	RSH1A005-1U	SW OPEN	[M]
SW4	K0L1BA000007	SW CD	[M]
SW5	RSP1A017-A	SW LOAD	[M]
		CONNECTORS	
CN1	K1MN14A00049	14P FFC CONNECTOR	[M]
CN971	K1MN10B00104	10P FFC CONNECTOR	[M]
CN1001	K1MN14B00058	14P CONNECTOR	[M]
CN2801	RJS1A9416-1	16P CONECTOR	[M]
CN2803	RJS1A9414-1	14P CONNECTOR	[M]
CN2805	RJS1A9414-1	14P CONNECTOR	[M]
CN2806	K1MN30A00046	30P FFC CONNECTOR	[M]
CN2808	K1KB12B00036	12P CONNECTOR	[M]
CN2809	K1KB12B00036	12P CONNECTOR	[M]
CN2810	K1KA02A00008	2P CONNECTOR	[M]
CN5800	K1KA12A00184	12P CONNECTOR	[M]
CN5801	K1KA12A00184	12P CONNECTOR	[M]
CN5950	K1KA09A00227	9P CONNECTOR	[M]
CN5951	K1KA09A00047	9P CONNECTOR	[M]
CN6601	K1MN30A00046	30P FFC CONNECTOR	[M]
CN7001	RJS2A8616	16P FPC CONNECTOR	[M]
CN7002	RJS1A9316	16P FFC CONNECTOR	[M]
CP6401	K1MN10B00104	10P FFC CONNECTOR	[M]
CS1001	K1MN05A00039	2P CONNECTOR	[M]
CS1002	K1MN05A00039	2P CONNECTOR	[M]
		CERAMIC FILTERS	
CF2601	J0B1065A0019	CERAMIC FILTER	[M]
CF2602	J0B1065A0019	CERAMIC FILTER	[M]
		COILS & TRANSFORMERS	
L1	RLQZP1R2KT-Y	COIL	[M]
L2	RLQZPR47KT-Y	COIL	[M]
L1001	G0C470JA0052	RF CHOKE COIL	[M]
L1002	7L1A62N	BIAS OSC COIL	[M]
L2601	GNS-A0882DC	AM COIL	[M]
L2602	G2BPC0000016	OSCILLATOR COIL	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
L2996	ERJ3GEY0R00V	CHIP JUMPER	[M]
T5950	G4C7AFC00003	TRANSFORMER	[M] ⚠
T5951	RTP1H3E002	BACK UP TRANSFORMER	[M] ⚠
		COMPONENT COMBINATIONS	
Z971	RGSD12A1445T	RADA RESISTOR	[M]
Z2602	G2BAD0000003	AM IFT	[M]
Z5950	ERZV10V511CS	ZENER	[M] ⚠
Z6481	B3RAB0000040	IR SENSOR	[M]
		RELAY	
RL5950	K6B1AEA00015	POWER RELAY	[M] ⚠
		OSCILLATORS	
X2602	H3F1065A0002	DISCRIMINATOR	[M]
X2603	H0H720400005	CRYSTAL OSCILLATOR	[M]
X2801	H0A327200073	CRYSTAL OSCILLATOR	[M]
X2802	H2B100500004	CERAMIC RESONATORS	[M]
X7201	H2B169500002	RESONATOR	[M]
		DISPLAY TUBE	
FL6601	A2BD00000111	FL	[M]
		FUSE	
F1	K5D252BLA013	2.5A FUSE	[M] ⚠
		FUSE HOLDERS	
FC1	K3GE1BA00021	FUSE CLIP	[M]
FC2	K3GE1BA00021	FUSE CLIP	[M]
		FUSE PROTECTORS	
FP5833	K5G400A00001	FUSE PROTECTOR	[M] ⚠
FP5950	K5G402A00025	FUSE PROTECTOR	[M] ⚠
FP5951	K5G102A00023	FUSE PROTECTOR	[M] ⚠
		HOLDERS	
H5950	RJS1A5509	9P CABLE HOLDER	[M]
H6555	K1YZ09000002	WIRE HOLDER	[M]
		JACKS	
JK2601	RJH5414-1	JK ANTENNA	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
JK2801	K2HA204B0153	JK 2P RCA	[M]
JK5950	K2AA2B000011	JK AC INLET	[M] ⚠
JK5952	K4BC04B00111	JK SPEAKER	[M]
JK6551	K2HC103A0023	JK SMALL SIGN	[M]
		EARTH TERMINAL	
E5800	SNE1004-2	EARTH TERMINAL	[M]
		WIRES	
W1	REZ1023-1	4P WIRE	[M]
W2	REZ1024	3P WIRE	[M]
W1002	RWJ0102050CK	MECHA MOTOR WIRE	[M]
W5950	REXX0325	9P FLAT WIRE	[M]
W6555	REXX0324	9P FLAT WIRE	[M]
		CHIP RESISTORS	
W2901	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2902	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2903	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2904	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2905	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2906	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2907	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2908	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2910	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2911	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2912	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2913	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2914	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2915	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2916	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2918	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2919	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2920	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2921	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2922	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2923	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2924	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2925	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2926	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2927	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2928	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2929	ERJ3GEY0R00V	CHIP JUMPER	[M]
W2930	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7001	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7002	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7003	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7004	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7005	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7006	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7007	ERJ3GEY0R00V	CHIP JUMPER	[M]

W7007	ERJ3GEY0R00V	CHIP JUMPER	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
W7008	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7009	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7010	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7011	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7012	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7013	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7014	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7015	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7016	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7017	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7018	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7019	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7020	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7021	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7022	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7023	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7024	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7025	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7027	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7028	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7033	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7034	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7040	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7041	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7042	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7043	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7044	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7050	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7051	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7052	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7053	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7054	ERJ3GEY0R00V	CHIP JUMPER	[M]
W7055	ERJ3GEY0R00V	CHIP JUMPER	[M]
		RESISTORS	
R1	ERDS2TJ102T	1K 1/4W	[M]
R1	ERDS2TJ104T	100K 1/4W	[M]
R2	ERDS2TJ104T	100K 1/4W	[M]
R3	ERDS2TJ221T	220 1/4W	[M]
R4	ERDS2TJ104T	100K 1/4W	[M]
R5	ERDS2TJ564T	560K 1/4W	[M]
R6	ERDS2TJ391T	390 1/4W	[M]
R7	ERDS2TJ272T	2.7K 1/4W	[M]
R8	ERDS2TJ684T	680K 1/4W	[M]
R9	ERDS2TJ391T	390 1/4W	[M]
R10	ERDS2TJ391T	390 1/4W	[M]
R11	ERDS2TJ684T	680K 1/4W	[M]
R952	ERDS2TJ821T	820 1/4W	[M]
R953	ERDS2TJ393T	39K 1/4W	[M]
R972	ERDS2TJ821T	820 1/4W	[M]
R973	ERDS2TJ393T	39K 1/4W	[M]
R1001	ERJ3GEYJ1R0V	1 1/16W	[M]
R1002	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R1003	ERJ3GEYJ103V	10K 1/16W	[M]
R1004	ERJ3GEYJ152V	1.5K 1/16W	[M]
R1005	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1007	ERD25FVJ4R7T	4.7 1/4W	[M]
R1009	ERJ3GEYJ183V	18K 1/16W	[M]
R1010	ERJ3GEYJ183V	18K 1/16W	[M]
R1011	ERJ3GEYJ103V	10K 1/16W	[M]
R1012	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1013	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1014	ERJ3GEYJ472V	4.7K 1/16W	[M]
R1015	ERJ3GEYJ470V	47 1/16W	[M]
R1016	ERJ3GEYJ470V	47 1/16W	[M]
R1017	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1018	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1019	ERJ3GEYJ392V	3.9K 1/16W	[M]
R1020	ERJ3GEY0R00V	0 1/16W	[M]
R1022	ERJ3GEYJ103V	10K 1/16W	[M]
R1024	ERJ3GEY0R00V	0 1/16W	[M]
R1025	ERJ3GEY0R00V	0 1/16W	[M]
R1026	ERJ3GEYJ102V	1K 1/16W	[M]
R1027	ERJ3GEY0R00V	0 1/16W	[M]
R1028	ERJ3GEYJ822V	8.2K 1/16W	[M]
R1029	ERJ3GEYJ475V	4.7M 1/16W	[M]
R1030	ERJ3GEYJ101V	100 1/16W	[M]
R1031	ERJ3GEYJ273V	27K 1/16W	[M]
R1032	ERJ3GEYJ103V	10K 1/16W	[M]
R1035	ERJ3GEYJ103V	10K 1/16W	[M]
R1040	ERJ3GEY0R00V	0 1/16W	[M]
R1049	ERJ3GEY0R00V	0 1/16W	[M]
R1050	ERJ3GEY0R00V	0 1/16W	[M]
R1055	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1057	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1060	ERJ3GEYJ391V	390 1/16W	[M]
R1084	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1085	ERJ3GEYJ473V	47K 1/16W	[M]
R1086	ERJ3GEYJ222V	2.2K 1/16W	[M]
R1087	ERJ3GEYJ473V	47K 1/16W	[M]
R1090	ERJ3GEYJ221V	220 1/16W	[M]
R1091	ERJ3GEY0R00V	0 1/16W	[M]
R1092	ERJ3GEY0R00V	0 1/16W	[M]
R1097	ERJ3GEYJ103V	10K 1/16W	[M]
R1098	ERJ3GEYJ103V	10K 1/16W	[M]
R1099	ERJ3GEY0R00V	0 1/16W	[M]
R1100	ERJ3GEY0R00V	0 1/16W	[M]
R1101	ERJ3GEY0R00V	0 1/16W	[M]
R2101	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2102	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2103	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2106	ERJ3GEYJ101V	100 1/16W	[M]
R2107	ERJ3GEYJ473V	47K 1/16W	[M]
R2108	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2111	ERJ3GEYJ103V	10K 1/16W	[M]
R2112	ERJ3GEYJ223V	22K 1/16W	[M]
R2113	ERJ3GEYJ822V	8.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2116	ERJ3GEYJ123V	12K 1/16W	[M]
R2117	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2118	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2141	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2142	ERJ3GEYJ223V	22K 1/16W	[M]
R2143	ERJ3GEYJ104V	100K 1/16W	[M]
R2152	ERJ3GEY0R00V	0 1/16W	[M]
R2154	ERJ3GEYJ104V	100K 1/16W	[M]
R2166	ERJ3GEYJ330V	33 1/16W	[M]
R2167	ERJ3GEYJ330V	33 1/16W	[M]
R2168	ERJ3GEYJ330V	33 1/16W	[M]
R2169	ERJ3GEYJ330V	33 1/16W	[M]
R2170	ERJ3GEYJ1R0V	1 1/16W	[M]
R2171	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2181	ERJ3GEY0R00V	0 1/16W	[M]
R2184	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2201	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2202	ERJ3GEYJ182V	1.8K 1/16W	[M]
R2206	ERJ3GEYJ101V	100 1/16W	[M]
R2207	ERJ3GEYJ473V	47K 1/16W	[M]
R2211	ERJ3GEYJ103V	10K 1/16W	[M]
R2212	ERJ3GEYJ223V	22K 1/16W	[M]
R2216	ERJ3GEYJ123V	12K 1/16W	[M]
R2217	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2241	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2242	ERJ3GEYJ223V	22K 1/16W	[M]
R2243	ERJ3GEYJ104V	100K 1/16W	[M]
R2252	ERJ3GEY0R00V	0 1/16W	[M]
R2254	ERJ3GEYJ104V	100K 1/16W	[M]
R2266	ERJ3GEYJ330V	33 1/16W	[M]
R2267	ERJ3GEYJ330V	33 1/16W	[M]
R2268	ERJ3GEYJ330V	33 1/16W	[M]
R2269	ERJ3GEYJ330V	33 1/16W	[M]
R2270	ERJ3GEYJ1R0V	1 1/16W	[M]
R2271	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2281	ERJ3GEY0R00V	0 1/16W	[M]
R2284	ERJ3GEYJ822V	8.2K 1/16W	[M]
R2302	ERJ3GEYJ153V	15K 1/16W	[M]
R2303	ERJ3GEYJ274V	270K 1/16W	[M]
R2311	ERJ3GEY0R00V	0 1/16W	[M]
R2316	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2317	ERJ3GEYJ104V	100K 1/16W	[M]
R2318	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2402	ERJ3GEYJ153V	15K 1/16W	[M]
R2403	ERJ3GEYJ274V	270K 1/16W	[M]
R2411	ERJ3GEY0R00V	0 1/16W	[M]
R2416	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2417	ERJ3GEYJ104V	100K 1/16W	[M]
R2418	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2501	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2502	ERJ3GEYJ563V	56K 1/16W	[M]
R2503	ERJ3GEYJ154V	150K 1/16W	[M]
R2531	ERJ3GEY0R00V	0 1/16W	[M]
R2532	ERJ3GEY0R00V	0 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2571	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2582	ERJ3GEY0R00V	0 1/16W	[M]
R2584	ERJ3GEYJ334V	330K 1/16W	[M]
R2585	ERJ3GEYJ334V	330K 1/16W	[M]
R2586	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2587	ERJ3GEYJ122V	1.2K 1/16W	[M]
R2601	ERJ3GEY0R00V	0 1/16W	[M]
R2602	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2603	ERJ3GEYJ271V	270 1/16W	[M]
R2604	ERJ3GEYJ102V	1K 1/16W	[M]
R2605	ERJ3GEYJ471V	470 1/16W	[M]
R2606	ERJ3GEYJ474V	470K 1/16W	[M]
R2607	ERJ3GEYJ331V	330 1/16W	[M]
R2610	ERJ3GEYJ102V	1K 1/16W	[M]
R2611	ERJ3GEYJ391V	390 1/16W	[M]
R2612	ERJ3GEYJ104V	100K 1/16W	[M]
R2613	ERJ3GEYJ103V	10K 1/16W	[M]
R2614	ERJ3GEYJ562V	5.6K 1/16W	[M]
R2615	ERJ3GEYJ561V	560 1/16W	[M]
R2616	ERJ3GEYJ102V	1K 1/16W	[M]
R2617	ERJ3GEYJ473V	47K 1/16W	[M]
R2618	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2619	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2620	ERJ3GEYJ473V	47K 1/16W	[M]
R2621	ERJ3GEYJ223V	22K 1/16W	[M]
R2622	ERJ3GEYJ272V	2.7K 1/16W	[M]
R2623	ERJ3GEYJ683V	68K 1/16W	[M]
R2624	ERJ3GEYJ330V	33 1/16W	[M]
R2625	ERJ3GEYJ471V	470 1/16W	[M]
R2626	ERJ3GEYJ102V	1K 1/16W	[M]
R2627	ERJ3GEYJ471V	470 1/16W	[M]
R2628	ERJ3GEYJ820V	82 1/16W	[M]
R2629	ERJ3GEYJ273V	27K 1/16W	[M]
R2630	ERJ3GEYJ103V	10K 1/16W	[M]
R2631	ERJ3GEYJ121V	120 1/16W	[M]
R2632	ERJ3GEYJ103V	10K 1/16W	[M]
R2633	ERJ3GEYJ102V	1K 1/16W	[M]
R2634	ERJ3GEYJ471V	470 1/16W	[M]
R2635	ERJ3GEYJ102V	1K 1/16W	[M]
R2636	ERJ3GEYJ102V	1K 1/16W	[M]
R2637	ERJ3GEYJ102V	1K 1/16W	[M]
R2638	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2641	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2642	ERJ3GEYJ682V	6.8K 1/16W	[M]
R2643	ERJ3GEYJ223V	22K 1/16W	[M]
R2644	ERJ3GEYJ121V	120 1/16W	[M]
R2645	ERJ3GEYJ104V	100K 1/16W	[M]
R2646	ERJ3GEYJ104V	100K 1/16W	[M]
R2651	ERJ3GEYJ820V	82 1/16W	[M]
R2652	ERJ3GEY0R00V	0 1/16W	[M]
R2701	ERJ3GEYJ225V	2.2M 1/16W	[M]
R2702	ERJ3GEYJ332V	3.3K 1/16W	[M]
R2704	ERJ3GEY0R00V	0 1/16W	[M]
R2705	ERJ3GEYJ222V	2.2K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2706	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2707	ERJ3GEYJ102V	1K 1/16W	[M]
R2708	ERJ3GEYJ103V	10K 1/16W	[M]
R2709	ERJ3GEYJ104V	100K 1/16W	[M]
R2710	ERJ3GEYJ224V	220K 1/16W	[M]
R2711	ERJ3GEYJ101V	100 1/16W	[M]
R2712	ERDS1FVJ220T	22 1/2W	[M]
R2713	ERJ3GEYJ104V	100K 1/16W	[M]
R2714	ERJ3GEYJ124V	120K 1/16W	[M]
R2715	ERJ3GEYJ103V	10K 1/16W	[M]
R2801	ERJ3GEYJ103V	10K 1/16W	[M]
R2802	ERJ3GEYJ101V	100 1/16W	[M]
R2803	ERJ3GEYJ103V	10K 1/16W	[M]
R2804	ERJ3GEYJ473V	47K 1/16W	[M]
R2805	ERJ3GEYJ473V	47K 1/16W	[M]
R2806	ERJ3GEYJ103V	10K 1/16W	[M]
R2807	ERJ3GEYJ103V	10K 1/16W	[M]
R2810	ERJ3GEYJ223V	22K 1/16W	[M]
R2811	ERJ3GEY0R00V	0 1/16W	[M]
R2817	ERJ3GEYJ104V	100K 1/16W	[M]
R2818	ERJ3GEYJ104V	100K 1/16W	[M]
R2819	ERJ3GEYJ104V	100K 1/16W	[M]
R2820	ERJ3GEYJ104V	100K 1/16W	[M]
R2821	ERJ3GEYJ104V	100K 1/16W	[M]
R2822	ERJ3GEYJ104V	100K 1/16W	[M]
R2823	ERJ3GEYJ104V	100K 1/16W	[M]
R2824	ERJ3GEYJ104V	100K 1/16W	[M]
R2831	ERJ3GEYJ103V	10K 1/16W	[M]
R2834	ERJ3GEYJ102V	1K 1/16W	[M]
R2841	ERJ3GEYJ103V	10K 1/16W	[M]
R2842	ERJ3GEYJ103V	10K 1/16W	[M]
R2843	ERJ3GEYJ102V	1K 1/16W	[M]
R2844	ERJ3GEYJ103V	10K 1/16W	[M]
R2845	ERJ3GEYJ103V	10K 1/16W	[M]
R2846	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2856	ERJ3GEYJ101V	100 1/16W	[M]
R2857	ERJ3GEYJ101V	100 1/16W	[M]
R2858	ERJ3GEYJ101V	100 1/16W	[M]
R2859	ERJ3GEYJ101V	100 1/16W	[M]
R2860	ERJ3GEYJ101V	100 1/16W	[M]
R2861	ERJ3GEYJ101V	100 1/16W	[M]
R2862	ERJ3GEYJ101V	100 1/16W	[M]
R2867	ERJ3GEYJ104V	100K 1/16W	[M]
R2876	ERJ3GEYJ223V	22K 1/16W	[M]
R2877	ERJ3GEYJ223V	22K 1/16W	[M]
R2878	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2881	ERJ3GEYJ221V	220 1/16W	[M]
R2882	ERJ3GEYJ106V	10M 1/16W	[M]
R2883	ERJ3GEYJ334V	330K 1/16W	[M]
R2886	ERJ3GEYJ105V	1M 1/16W	[M]
R2891	ERJ3GEYJ473V	47K 1/16W	[M]
R2892	ERJ3GEY0R00V	0 1/16W	[M]
R2899	ERJ3GEYJ473V	47K 1/16W	[M]
R2901	ERJ3GEYJ103V	10K 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R2902	ERDS1FVJ120T	12 1/2W	[M]
R2903	ERDS1FVJ150T	15 1/2W	[M]
R2907	ERJ3GEYJ102V	1K 1/16W	[M]
R2908	ERJ3GEYJ331V	330 1/16W	[M]
R2909	ERJ3GEYJ222V	2.2K 1/16W	[M]
R2910	ERJ3GEYJ331V	330 1/16W	[M]
R2911	ERJ3GEY0R00V	0 1/16W	[M]
R2912	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2913	ERJ3GEY0R00V	0 1/16W	[M]
R2914	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2915	ERJ3GEY0R00V	0 1/16W	[M]
R2916	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2917	ERJ3GEY0R00V	0 1/16W	[M]
R2918	ERJ3GEYJ103V	10K 1/16W	[M]
R2919	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2920	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2921	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2922	ERJ3GEYJ103V	10K 1/16W	[M]
R2923	ERJ3GEY0R00V	0 1/16W	[M]
R2924	ERJ3GEYJ103V	10K 1/16W	[M]
R2925	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2926	ERJ3GEY0R00V	0 1/16W	[M]
R2927	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2928	ERJ3GEYJ103V	10K 1/16W	[M]
R2929	ERJ3GEYJ103V	10K 1/16W	[M]
R2930	ERJ3GEYJ103V	10K 1/16W	[M]
R2931	ERJ3GEYJ103V	10K 1/16W	[M]
R2932	ERJ3GEY0R00V	0 1/16W	[M]
R2933	ERJ3GEY0R00V	0 1/16W	[M]
R2936	ERJ3GEYJ102V	1K 1/16W	[M]
R2937	ERJ3GEYJ103V	10K 1/16W	[M]
R2938	ERJ3GEYJ123V	12K 1/16W	[M]
R2939	ERJ3GEYJ223V	22K 1/16W	[M]
R2940	ERJ3GEYJ221V	220 1/16W	[M]
R2941	ERJ3GEYJ123V	12K 1/16W	[M]
R2942	ERJ3GEYJ223V	22K 1/16W	[M]
R2943	ERJ3GEYJ103V	10K 1/16W	[M]
R2944	ERJ3GEYJ103V	10K 1/16W	[M]
R2945	ERJ3GEYJ473V	47K 1/16W	[M]
R2946	ERJ3GEYJ473V	47K 1/16W	[M]
R2952	ERJ3GEYJ472V	4.7K 1/16W	[M]
R2953	ERJ3GEYJ103V	10K 1/16W	[M]
R2954	ERDS1FVJ270T	27 1/2W	[M]
R2976	ERJ3GEY0R00V	0 1/16W	[M]
R2977	ERJ3GEY0R00V	0 1/16W	[M]
R5242	ERDS2TJ562T	5.6K 1/4W	[M]
R5245	ERDS2TJ562T	5.6K 1/4W	[M]
R5246	ERDS2TJ153T	15K 1/4W	[M]
R5250	ERDS2TJ683T	68K 1/4W	[M]
R5251	ERDS2TJ154T	150K 1/4W	[M]
R5445	ERDS2TJ562T	5.6K 1/4W	[M]
R5446	ERDS2TJ153T	15K 1/4W	[M]
R5447	ERDS2TJ562T	5.6K 1/4W	[M]
R5449	ERDS2TJ683T	68K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R5450	ERDS2TJ334T	330K 1/4W	[M]
R5451	ERDS2TJ154T	150K 1/4W	[M]
R5455	ERDS1FVJ100T	10 1/2W	[M]
R5545	ERDS2TJ563T	56K 1/4W	[M]
R5546	ERDS2TJ563T	56K 1/4W	[M]
R5801	ERDS2TJ103T	10K 1/4W	[M]
R5802	ERDS2TJ223T	22K 1/4W	[M]
R5804	ERDS2TJ473T	47K 1/4W	[M]
R5805	ERDS2TJ473T	47K 1/4W	[M]
R5806	ERDS2TJ104T	100K 1/4W	[M]
R5807	ERDS1FVJ271T	270 1/2W	[M]
R5808	ERDS1FVJ271T	270 1/2W	[M]
R5809	ERDS1FVJ391T	390 1/2W	[M]
R5810	ERDS2TJ272T	2.7K 1/4W	[M]
R5811	ERDS2TJ471T	470 1/4W	[M]
R5812	ERDS2TJ272T	2.7K 1/4W	[M]
R5813	ERDS2TJ332T	3.3K 1/4W	[M]
R5814	ERDS2TJ332T	3.3K 1/4W	[M]
R5816	ERDS1FVJ150T	15 1/2W	[M]
R5818	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5819	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5820	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5821	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5822	ERDS2TJ332T	3.3K 1/4W	[M]
R5823	ERDS2TJ471T	470 1/4W	[M]
R5824	ERDS2TJ2R2T	2.2 1/4W	[M]
R5825	ERDS2TJ2R2T	2.2 1/4W	[M]
R5826	ERDS2TJ2R2T	2.2 1/4W	[M]
R5827	ERDS2TJ2R2T	2.2 1/4W	[M]
R5828	ERDS2TJ103T	10K 1/4W	[M]
R5829	ERDS1FVJ331T	330 1/2W	[M]
R5830	ERDS2TJ122T	1.2K 1/4W	[M]
R5831	ERDS2TJ222T	2.2K 1/4W	[M]
R5832	ERDS2TJ151T	150 1/4W	[M]
R5834	ERDS1FVJ270T	27 1/2W	[M]
R5847	ERDS1FVJ220T	22 1/2W	[M]
R5853	ERDS2TJ224T	220K 1/4W	[M]
R5854	ERDS2TJ223T	22K 1/4W	[M]
R5855	ERDS1FVJ100T	10 1/2W	[M]
R5856	ERDS2TJ223T	22K 1/4W	[M]
R5858	ERDS1FVJ8R2T	8.2 1/2W	[M]
R5951	ERDS2TJ332T	3.3K 1/4W	[M]
R5952	ERDS2TJ102T	1K 1/4W	[M]
R5953	ERDS2TJ151T	150 1/4W	[M]
R5954	ERDS1FVJ100T	10 1/2W	[M]
R5955	ERDS1FVJ100T	10 1/2W	[M]
R5956	ERDS1FVJ100T	10 1/2W	[M]
R5957	ERDS2TJ103T	10K 1/4W	[M]
R5958	ERDS2TJ103T	10K 1/4W	[M]
R5960	ERDS2TJ472T	4.7K 1/4W	[M]
R5961	ERDS2TJ151T	150 1/4W	[M]
R5965	ERDS2TJ123T	12K 1/4W	[M]
R6102	ERDS2TJ102T	1K 1/4W	[M]
R6103	ERDS2TJ102T	1K 1/4W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R6104	ERDS2TJ122T	1.2K 1/4W	[M]
R6105	ERDS2TJ182T	1.8K 1/4W	[M]
R6106	ERDS2TJ222T	2.2K 1/4W	[M]
R6111	ERDS2TJ473T	47K 1/4W	[M]
R6199	ERDS2TJ103T	10K 1/4W	[M]
R6202	ERDS2TJ102T	1K 1/4W	[M]
R6203	ERDS2TJ102T	1K 1/4W	[M]
R6204	ERDS2TJ122T	1.2K 1/4W	[M]
R6205	ERDS2TJ182T	1.8K 1/4W	[M]
R6206	ERDS2TJ222T	2.2K 1/4W	[M]
R6207	ERDS2TJ272T	2.7K 1/4W	[M]
R6208	ERDS2TJ472T	4.7K 1/4W	[M]
R6209	ERDS2TJ682T	6.8K 1/4W	[M]
R6210	ERDS2TJ103T	10K 1/4W	[M]
R6302	ERDS2TJ102T	1K 1/4W	[M]
R6303	ERDS2TJ102T	1K 1/4W	[M]
R6304	ERDS2TJ122T	1.2K 1/4W	[M]
R6305	ERDS2TJ182T	1.8K 1/4W	[M]
R6399	ERDS2TJ103T	10K 1/4W	[M]
R6401	ERDS2TJ103T	10K 1/4W	[M]
R6402	ERDS2TJ103T	10K 1/4W	[M]
R6403	ERDS2TJ2R7T	2.7 1/4W	[M]
R6404	ERDS2TJ2R7T	2.7 1/4W	[M]
R6405	ERDS2TJ274T	270K 1/4W	[M]
R6406	ERDS2TJ274T	270K 1/4W	[M]
R6411	ERDS2TJ223T	22K 1/4W	[M]
R6412	ERDS2TJ102T	1K 1/4W	[M]
R6415	ERDS2TJ223T	22K 1/4W	[M]
R6416	ERDS2TJ102T	1K 1/4W	[M]
R6421	ERDS2TJ103T	10K 1/4W	[M]
R6425	ERDS2TJ103T	10K 1/4W	[M]
R6457	ERDS2TJ392T	3.9K 1/4W	[M]
R6458	ERDS2TJ472T	4.7K 1/4W	[M]
R6491	ERDS2TJ473T	47K 1/4W	[M]
R6492	ERDS2TJ473T	47K 1/4W	[M]
R6493	ERDS2TJ103T	10K 1/4W	[M]
R6601	ERDS2TJ471T	470 1/4W	[M]
R6602	ERDS2TJ471T	470 1/4W	[M]
R6603	ERDS2TJ221T	220 1/4W	[M]
R6604	ERDS2TJ221T	220 1/4W	[M]
R6611	ERDS2TJ153T	15K 1/4W	[M]
R6631	ERD2FCVG470T	47 1/4W	[M]
R6632	ERD2FCVG470T	47 1/4W	[M]
R7102	ERJ3GEYJ472V	4.7K 1/16W	[M]
R7104	ERJ3GEYJ102V	1K 1/16W	[M]
R7105	ERJ3GEYJ393V	39K 1/16W	[M]
R7106	ERJ3GEYJ102V	1K 1/16W	[M]
R7144	ERJ3GEYJ473V	47K 1/16W	[M]
R7211	ERJ3GEYJ823V	82K 1/16W	[M]
R7212	ERJ3GEYJ821V	820 1/16W	[M]
R7214	ERJ3GEYJ681V	680 1/16W	[M]
R7217	ERJ3GEYJ102V	1K 1/16W	[M]
R7218	ERJ3GEYJ102V	1K 1/16W	[M]
R7220	ERJ3GEYJ105V	1M 1/16W	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
R7221	ERJ3GEYJ101V	100 1/16W	[M]
R7253	ERJ3GEYJ100V	10 1/16W	[M]
R7254	ERJ3GEYJ102V	1K 1/16W	[M]
R7315	ERJ3GEYJ272V	2.7K 1/16W	[M]
R7323	ERJ3GEYJ562V	5.6K 1/16W	[M]
R7325	ERJ3GEYJ561V	560 1/16W	[M]
R7327	ERJ3GEYJ152V	1.5K 1/16W	[M]
R7328	ERJ3GEYJ183V	18K 1/16W	[M]
R7329	ERJ3GEYJ152V	1.5K 1/16W	[M]
R7331	ERJ3GEYJ223V	22K 1/16W	[M]
R7335	ERJ3GEYJ101V	100 1/16W	[M]
R7336	ERJ3GEYJ100V	10 1/16W	[M]
R7339	ERJ3GEYJ102V	1K 1/16W	[M]
R7349	ERJ3GEYJ153V	15K 1/16W	[M]
R7601	ERJ3GEYJ4R7V	4.7 1/16W	[M]
R7650	ERJ3GEYJ5R6V	5.6 1/16W	[M]
		CAPACITORS	
C1	ECBT1H5R6KC5	5.6P 50V	[M]
C1	ECEA1CKA101B	100 16V	[M]
C2	F1D1E103A004	0.01 25V	[M]
C2	F1D1H102A029	1000P 50V	[M]
C3	ECBT1H2R2KC5	2.2P 50V	[M]
C4	ECBT1H181KB5	180P 50V	[M]
C5	ECBT1H5R6KC5	5.6P 50V	[M]
C6	ECBT1H3R3KC5	3.3P 50V	[M]
C7	ECBT1H4R7KC5	4.7P 50V	[M]
C8	ECBT1H3R3KC5	3.3P 50V	[M]
C9	ECBT1H2R2KC5	2.2P 50V	[M]
C10	ECBT1H180JC5	18P 50V	[M]
C11	F1D1H102A029	1000P 50V	[M]
C1002	ECEA1HKN2R2B	2.2 50V	[M]
C1006	ECEA1HKA010B	1 50V	[M]
C1007	F0A2A472A034	4700P 100V	[M]
C1008	ECEA1HKA010B	1 50V	[M]
C1009	ECEA1CKA470B	47 16V	[M]
C1010	ECA1EM101B	100 25V	[M]
C1011	ECQV1H473JZ3	0.047 50V	[M]
C1012	ECJ1VB1H102K	1000P 50V	[M]
C1013	ECJ1VB1H102K	1000P 50V	[M]
C1014	ECJ1VB1H102K	1000P 50V	[M]
C1015	ECJ1VB1H102K	1000P 50V	[M]
C1016	ECJ1VB1H222K	2200P 50V	[M]
C1017	ECJ1VB1H222K	2200P 50V	[M]
C1018	ECJ1VB1H103K	0.01 50V	[M]
C1019	ECJ1VB1H102K	1000P 50V	[M]
C1020	ECJ1VB1H471K	470P 50V	[M]
C1021	ECJ1VB1H471K	470P 50V	[M]
C1022	ECJ1VB1H102K	1000P 50V	[M]
C1023	ECJ1VB1H102K	1000P 50V	[M]
C1026	ECEA0JKA470B	47 6.3V	[M]
C1027	ECJ1VB1H102K	1000P 50V	[M]
C1030	ECEA1AKA101B	100 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C1031	ECA1AM101B	100 10V	[M]
C1032	F1C1C183A023	0.018 16V	[M]
C1033	F1C1C183A023	0.018 16V	[M]
C1034	ECEA1HKA3R3B	3.3 50V	[M]
C1035	ECEA1HKA3R3B	3.3 50V	[M]
C1036	ECJ1VB1C333K	0.033 16V	[M]
C1037	ECEA1HKA3R3B	3.3 50V	[M]
C1038	ECJ1VB1H221K	220P 50V	[M]
C1039	ECJ1VB1H221K	220P 50V	[M]
C1040	ECEA1CKA100B	10 16V	[M]
C1041	ECEA1CKA100B	10 16V	[M]
C1042	ECEA1CKA220B	22 16V	[M]
C1043	ECEA1HKA4R7B	4.7 50V	[M]
C1044	ECEA1AKA330B	33 10V	[M]
C1045	ECEA1AKA220B	22 10V	[M]
C1046	ECA1CM221B	220 16V	[M]
C1049	ECJ1VB1H332K	3300P 50V	[M]
C1050	ECJ1VB1H332K	3300P 50V	[M]
C1056	ECEA1CKA100B	10 16V	[M]
C1057	ECJ1VB1H102K	1000P 50V	[M]
C1058	ECJ1VB1H102K	1000P 50V	[M]
C1059	ECJ1VB1H103K	0.01 50V	[M]
C2101	ECJ1VB1C105K	1 16V	[M]
C2102	ECJ1VB1C104K	0.1 16V	[M]
C2103	ECJ1VB1H102K	1000P 50V	[M]
C2106	ECJ1VB1H332K	3300P 50V	[M]
C2107	ECJ1VB1C104K	0.1 16V	[M]
C2108	ECJ1VB1H102K	1000P 50V	[M]
C2111	ECJ1VB1C104K	0.1 16V	[M]
C2112	ECJ1VB1H152K	1500P 50V	[M]
C2114	ECJ1VB1H103K	0.01 50V	[M]
C2116	ECJ1VB1H681K	680P 50V	[M]
C2117	ECJ1VC1H101K	100P 50V	[M]
C2118	ECJ1VB1C104K	0.1 16V	[M]
C2119	ECJ1VB1H102K	1000P 50V	[M]
C2120	ECJ1VB1C105K	1 16V	[M]
C2121	ECJ1VB1C104K	0.1 16V	[M]
C2126	ECJ1VB1C104K	0.1 16V	[M]
C2131	ECUV1C224KBV	0.22 16V	[M]
C2136	ECUV1C224KBV	0.22 16V	[M]
C2141	ECJ1VB1C105K	1 16V	[M]
C2142	ECJ1VB1C105K	1 16V	[M]
C2151	ECA1CM100B	10 16V	[M]
C2166	ECJ1VB1H102K	1000P 50V	[M]
C2181	ERJ3GEY0R00V	0 1/16W	[M]
C2183	ERJ3GEY0R00V	0 1/16W	[M]
C2184	ECJ1VB1H222K	2200P 50V	[M]
C2201	ECJ1VB1C105K	1 16V	[M]
C2202	ECJ1VB1C104K	0.1 16V	[M]
C2203	ECJ1VB1H102K	1000P 50V	[M]
C2206	ECJ1VB1H332K	3300P 50V	[M]
C2207	ECJ1VB1C104K	0.1 16V	[M]
C2208	ECJ1VB1H102K	1000P 50V	[M]
C2211	ECJ1VB1C104K	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2212	ECJ1VB1H152K	1500P 50V	[M]
C2214	ECJ1VB1H103K	0.01 50V	[M]
C2216	ECJ1VB1H681K	680P 50V	[M]
C2217	ECJ1VC1H101K	100P 50V	[M]
C2218	ECJ1VB1C104K	0.1 16V	[M]
C2219	ECJ1VB1H102K	1000P 50V	[M]
C2220	ECJ1VB1C105K	1 16V	[M]
C2221	ECJ1VB1C104K	0.1 16V	[M]
C2226	ECJ1VB1C104K	0.1 16V	[M]
C2231	ECJ1VB1C104K	0.1 16V	[M]
C2236	ECJ1VB1C104K	0.1 16V	[M]
C2241	ECJ1VB1C105K	1 16V	[M]
C2242	ECJ1VB1C105K	1 16V	[M]
C2251	ECA1CM100B	10 16V	[M]
C2266	ECJ1VB1H102K	1000P 50V	[M]
C2281	ERJ3GEY0R00V	0 1/16W	[M]
C2283	ERJ3GEY0R00V	0 1/16W	[M]
C2284	ECJ1VB1H222K	2200P 50V	[M]
C2301	ECJ1VC1H100J	10P 50V	[M]
C2302	ECJ1VC1H470J	47P 50V	[M]
C2311	ECJ1VB1A184K	0.18 10V	[M]
C2312	ECJ1VB1A154K	0.15 10V	[M]
C2401	ECJ1VC1H100J	10P 50V	[M]
C2402	ECJ1VC1H470J	47P 50V	[M]
C2411	ECJ1VB1A184K	0.18 10V	[M]
C2412	ECJ1VB1A154K	0.15 10V	[M]
C2501	ECEA1HKN2R2B	2.2 50V	[M]
C2520	ECJ1VB1H103K	0.01 50V	[M]
C2521	ECJ1VB1H103K	0.01 50V	[M]
C2581	ECA1AM330B	33 10V	[M]
C2582	ECA1CM101B	100 16V	[M]
C2583	ECUV1C224KBV	0.22 16V	[M]
C2584	ECJ1VB1H221K	220P 50V	[M]
C2585	ECJ1VB1H221K	220P 50V	[M]
C2588	ECJ1VB1C104K	0.1 16V	[M]
C2601	ECJ1VB1H103K	0.01 50V	[M]
C2602	ECEA1CKA100B	10 16V	[M]
C2603	ECJ1VB1H103K	0.01 50V	[M]
C2604	ECJ1VB1H102K	1000P 50V	[M]
C2606	ECJ1VB1H103K	0.01 50V	[M]
C2607	ECJ1VB1E473K	0.047 25V	[M]
C2608	ECJ1VC1H080D	8P 50V	[M]
C2609	ECJ1VB1H102K	1000P 50V	[M]
C2610	ECJ1VB1H103K	0.01 50V	[M]
C2611	ECEA1HKA4R7B	4.7 50V	[M]
C2612	ECJ1VB1H103K	0.01 50V	[M]
C2613	ECJ1VB1H102K	1000P 50V	[M]
C2614	ECEA1HKA3R3B	3.3 50V	[M]
C2615	ECEA1HKA4R7B	4.7 50V	[M]
C2616	ECJ1VB1C333K	0.033 16V	[M]
C2617	ECJ1VB1H103K	0.01 50V	[M]
C2618	ECJ1VB1H103K	0.01 50V	[M]
C2619	F0A2A681A010	680P 100V	[M]
C2620	ECEA1CKA100B	10 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2621	ECEA1HKAR47B	0.47 50V	[M]
C2622	ECEA1HKA010B	1 50V	[M]
C2623	ECEA1HKA010B	1 50V	[M]
C2624	ECJ1VC1H101K	100P 50V	[M]
C2625	ECEA1CKA220B	22 16V	[M]
C2626	ECJ2VF1C105Z	1 16V	[M]
C2627	ECEA1CKA220B	22 16V	[M]
C2629	ECA0JM101B	100 6.3V	[M]
C2630	ECA0JM101B	100 6.3V	[M]
C2631	ECJ1VC1H151J	150P 50V	[M]
C2632	ECJ1VB1H102K	1000P 50V	[M]
C2633	ECJ1VC1H120J	12P 50V	[M]
C2634	ECJ1VC1H120J	12P 50V	[M]
C2636	ECJ1VB1H102K	1000P 50V	[M]
C2637	ECJ1VB1H332K	3300P 50V	[M]
C2638	ECJ1VB1H103K	0.01 50V	[M]
C2639	ECEA1HKA4R7B	4.7 50V	[M]
C2641	ECEA1HKA010B	1 50V	[M]
C2642	ECEA1HKA010B	1 50V	[M]
C2643	ECJ1VB1H682K	6800P 50V	[M]
C2644	ECJ1VB1H682K	6800P 50V	[M]
C2647	ECJ1VB1H102K	1000P 50V	[M]
C2648	ECJ1VB1H103K	0.01 50V	[M]
C2649	ECJ1VF1C104Z	0.1 16V	[M]
C2701	ECJ1VB1H103K	0.01 50V	[M]
C2705	ECA1CM100B	10 16V	[M]
C2706	ECJ1VB1H103K	0.01 50V	[M]
C2707	ECEA1AKN100B	10 10V	[M]
C2708	ECA1CM101B	100 16V	[M]
C2751	ECJ1VB1C104K	0.1 16V	[M]
C2753	ECJ1VB1C104K	0.1 16V	[M]
C2811	ECJ1VC1H101K	100P 50V	[M]
C2812	ECJ1VC1H101K	100P 50V	[M]
C2813	ECJ1VC1H101K	100P 50V	[M]
C2814	ECJ1VC1H101K	100P 50V	[M]
C2815	ECJ1VC1H101K	100P 50V	[M]
C2816	ECJ1VC1H101K	100P 50V	[M]
C2817	ECJ1VC1H101K	100P 50V	[M]
C2818	ECJ1VC1H101K	100P 50V	[M]
C2819	ECJ1VC1H101K	100P 50V	[M]
C2820	ECJ1VC1H101K	100P 50V	[M]
C2821	ECJ1VC1H101K	100P 50V	[M]
C2831	ECJ1VB1C223K	0.022 16V	[M]
C2832	ECJ1VB1H331K	330P 50V	[M]
C2833	ECJ1VB1H331K	330P 50V	[M]
C2840	ECJ1VC1H180J	18P 50V	[M]
C2841	ECJ1VC1H180J	18P 50V	[M]
C2851	ECJ1VB1C104K	0.1 16V	[M]
C2852	ECA1CM101B	100 16V	[M]
C2853	ECJ1VB1C104K	0.1 16V	[M]
C2854	ECA1CM101B	100 16V	[M]
C2856	ECJ1VB1C105K	1 16V	[M]
C2857	ECEA1HKA2R2B	2.2 50V	[M]
C2901	ECJ1VB1C104K	0.1 16V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C2902	ECA1CM100B	10 16V	[M]
C2903	ECJ1VB1H103K	0.01 50V	[M]
C2904	ECA1CM101B	100 16V	[M]
C2905	ECA1CM101B	100 16V	[M]
C2906	ECJ1VB1H102K	1000P 50V	[M]
C2907	ECJ1VB1H471K	470P 50V	[M]
C2936	ECJ1VF1C474Z	0.47 16V	[M]
C2951	ECJ1VB1H103K	0.01 50V	[M]
C2952	ECJ1VB1H103K	0.01 50V	[M]
C2976	ECA1CM100B	10 16V	[M]
C2977	ECA1CM101B	100 16V	[M]
C2998	ECJ1VB1C104K	0.1 16V	[M]
C2999	ECJ1VB1C104K	0.1 16V	[M]
C5240	ECBT1H471KB5	470P 50V	[M]
C5242	ECBT1H821KB5	820P 50V	[M]
C5243	ECBT1H150JC5	15P 50V	[M]
C5244	F1D1H1040002	0.1 50V	[M]
C5440	ECBT1H821KB5	820P 50V	[M]
C5441	ECBT1H150JC5	15P 50V	[M]
C5442	ECBT1H471KB5	470P 50V	[M]
C5443	ECA2AM100B	10 100V	[M]
C5444	F1D1H1040002	0.1 50V	[M]
C5447	F1D1H1040002	0.1 50V	[M]
C5501	ECBT1H103KB5	0.01 50V	[M]
C5521	ECA2AM100B	10 100V	[M]
C5545	ECEA1HKA010B	1 50V	[M]
C5547	ECEA1HKA010B	1 50V	[M]
C5802	ECA0JM221B	220 6.3V	[M]
C5803	ECBT1H102KB5	1000P 50V	[M]
C5804	ECBT1H103KB5	0.01 50V	[M]
C5805	ECA1CM101B	100 16V	[M]
C5806	ECBT1H103KB5	0.01 50V	[M]
C5807	ECEA1CKA100B	10 16V	[M]
C5808	ECEA1CKA100B	10 16V	[M]
C5809	ECBT1H103KB5	0.01 50V	[M]
C5810	ECA1EM101B	100 25V	[M]
C5811	ECBT1H103KB5	0.01 50V	[M]
C5812	ECA1HM330B	33 50V	[M]
C5813	ECEA1EKA100B	10 25V	[M]
C5814	ECBT1H103KB5	0.01 50V	[M]
C5820	ECA1JM222B	2200 63V	[M]
C5838	ECEA1HKA2R2B	2.2 50V	[M]
C5840	ECA1JM222B	2200 63V	[M]
C5846	F1D1H1040002	0.1 50V	[M]
C5950	ECA1CM222B	2200 16V	[M]
C5951	ECKR1H103ZF5	0.01 50V	[M]
C5952	ECA1AM470B	47 10V	[M]
C5953	ECKR1H103ZF5	0.01 50V	[M]
C5954	ECKR1H103ZF5	0.01 50V	[M]
C5955	ECA1HM220B	22 50V	[M]
C5956	ECA1HM470B	47 50V	[M]
C5957	ECA1HM100B	10 50V	[M]
C5958	ECKR1H103ZF5	0.01 50V	[M]
C5959	ECKR1H103ZF5	0.01 50V	[M]

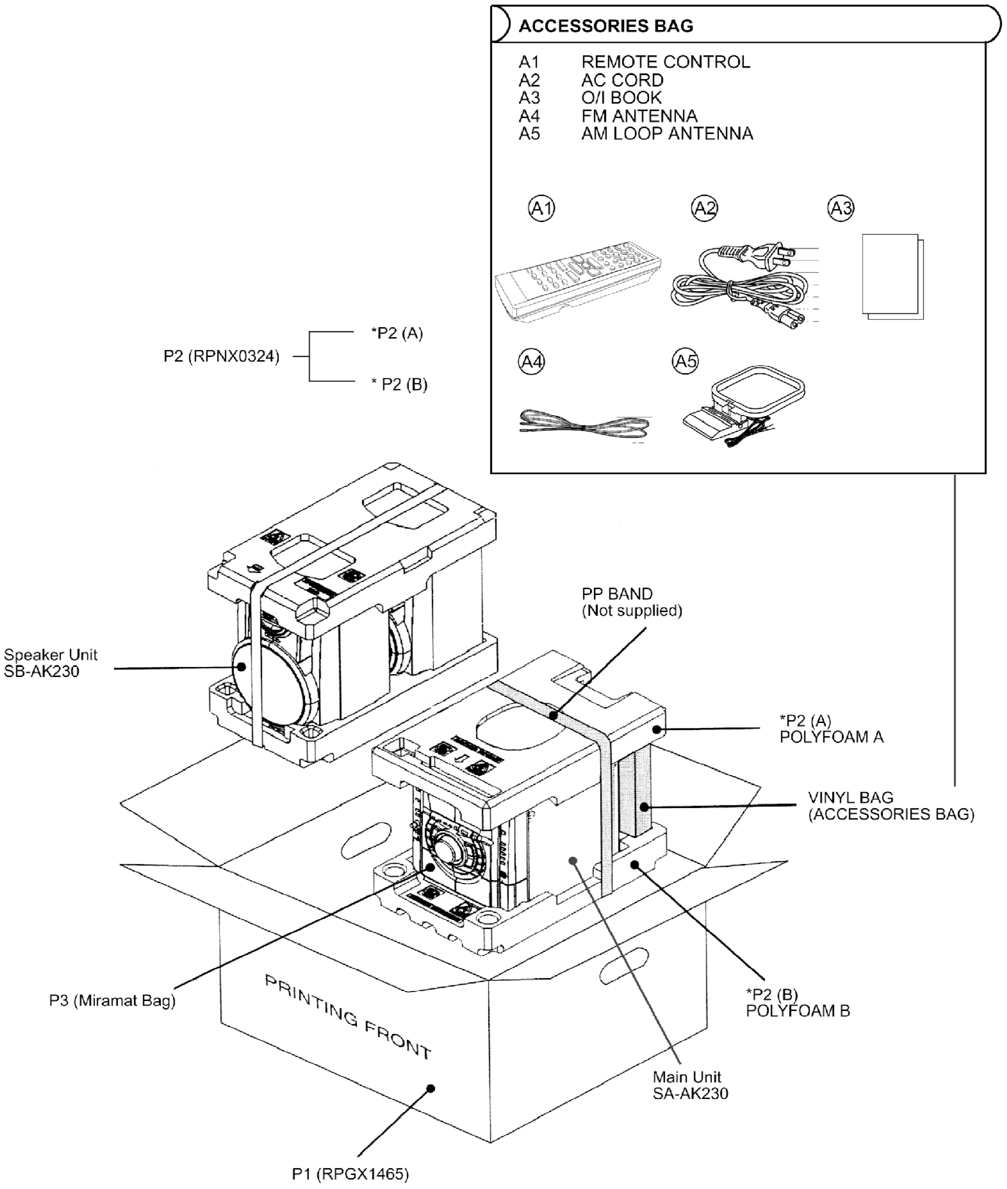
Ref. No.	Part No.	Part Name & Description	Remarks
C5960	ECQE2104KF3	0.1 250V	[M]
C5961	ECA1AM471B	470 10V	[M]
C5962	ECA1AM471B	470 10V	[M]
C5963	ECEA1VKA4R7B	4.7 35V	[M]
C6481	ECEA0JKA470B	47 6.3V	[M]
C6491	ECBT1H101KB5	100P 50V	[M]
C6492	ECBT1H101KB5	100P 50V	[M]
C6551	F1D1E103A004	0.01 25V	[M]
C6552	F1D1E103A004	0.01 25V	[M]
C6553	F1D1E103A004	0.01 25V	[M]
C6601	ECBT1H101KB5	100P 50V	[M]
C6602	ECBT1H102KB5	1000P 50V	[M]
C6603	ECBT1H101KB5	100P 50V	[M]
C6604	ECBT1H101KB5	100P 50V	[M]
C6612	ECBT1H270J5	27P 50V	[M]
C6621	ECBT1H101KB5	100P 50V	[M]
C6623	ECEA0JKA470B	47 6.3V	[M]
C6631	ECEA1VKA220B	22 35V	[M]
C6632	ECEA1VKA220B	22 35V	[M]
C6635	ECEA1HKA3R3B	3.3 50V	[M]
C6636	ECBT1H101KB5	100P 50V	[M]
C7102	ECJ1VB1A474K	0.47 10V	[M]
C7105	ECJ1VB1C104K	0.1 16V	[M]
C7106	ECJ1VB1C104K	0.1 16V	[M]
C7107	ECJ1VB1H223K	0.022 50V	[M]
C7110	ECJ1VB1H471K	470P 50V	[M]
C7142	ECJ1VB1H223K	0.022 50V	[M]
C7147	ECJ1VB1H391K	390P 50V	[M]
C7149	ECJ1VB1H392K	3900P 50V	[M]
C7155	ECJ1VB1C104K	0.1 16V	[M]
C7161	ECJ1VB1C104K	0.1 16V	[M]
C7166	ECJ1VB1H103K	0.01 50V	[M]
C7203	ECEA0JKA221I	220 6.3V	[M]
C7204	ECJ1VB1C104K	0.1 16V	[M]
C7216	ECJ1VB1H681K	680P 50V	[M]
C7217	ECJ1VB1C104K	0.1 16V	[M]
C7218	ECJ1VB1C823K	0.082 16V	[M]
C7223	ECEA0JKA101I	100 6.3V	[M]
C7224	ECJ1VB1C104K	0.1 16V	[M]
C7225	ECJ1VB1H102K	1000P 50V	[M]
C7226	ECJ1VB1H102K	1000P 50V	[M]
C7230	ECJ1VB1C104K	0.1 16V	[M]
C7231	ECEA0JKA221I	220 6.3V	[M]
C7232	ECEA0JKA221I	220 6.3V	[M]
C7233	ECJ1VF1C104Z	0.1 16V	[M]
C7234	ECEA1CKA100I	10 16V	[M]
C7235	ECEA1CKA100I	10 16V	[M]
C7241	ECJ1VB1H102K	1000P 50V	[M]
C7243	ECJ1VF1C104Z	0.1 16V	[M]
C7244	ECJ1VB1C153K	0.015 16V	[M]
C7253	ECJ1VB1H471K	470P 50V	[M]
C7263	ECJ1VB1C104K	0.1 16V	[M]
C7264	ECJ1VB1C104K	0.1 16V	[M]
C7315	ECJ1VB1A224K	0.22 10V	[M]

Ref. No.	Part No.	Part Name & Description	Remarks
C7334	ECEA1AKA221I	220 10V	[M]
C7335	ECJ1VF1C104Z	0.1 16V	[M]
C7338	ECJ1VB1A224K	0.22 10V	[M]
C7339	ECJ1VB1H103K	0.01 50V	[M]
C7352	ECJ1VB1H103K	0.01 50V	[M]
C7601	ECEA0JKA330I	33 6.3V	[M]
C7613	ECJ1VB1C104K	0.1 16V	[M]
C7614	ECEA0JKA101I	100 6.3V	[M]
C7625	ECEA0JKA221I	220 6.3V	[M]
C7626	ECJ1VB1C104K	0.1 16V	[M]
C7670	ECJ1VB1C104K	0.1 16V	[M]

22.5. Packing Materials & Accessories Parts List

Ref. No.	Part No.	Part Name & Description	Remarks
		PACKING MATERIALS	
P1	RPGX1465	PACKING CASE	[M]
P2	RPNX0324	POLYFOAM	[M]
P3	RPFX0007	MIRAMAT BAG	[M]
		ACCESSORIES	
A1	N2QAHB000047	REMOTE CONTROL	[M]
A1-1	RKK-HTR0283	R/C BATTERY COVER	[M]
A2	RJA0080-L	AC CORD	[M] ⚠
A3	RQT8808-K	O/I BOOK (Co)	[M]
A4	RSA0006-L	FM ANTENNA	[M]
A5	N1DAAAA00001	AM LOOP ANTENNA	[M]

22.6. Packaging

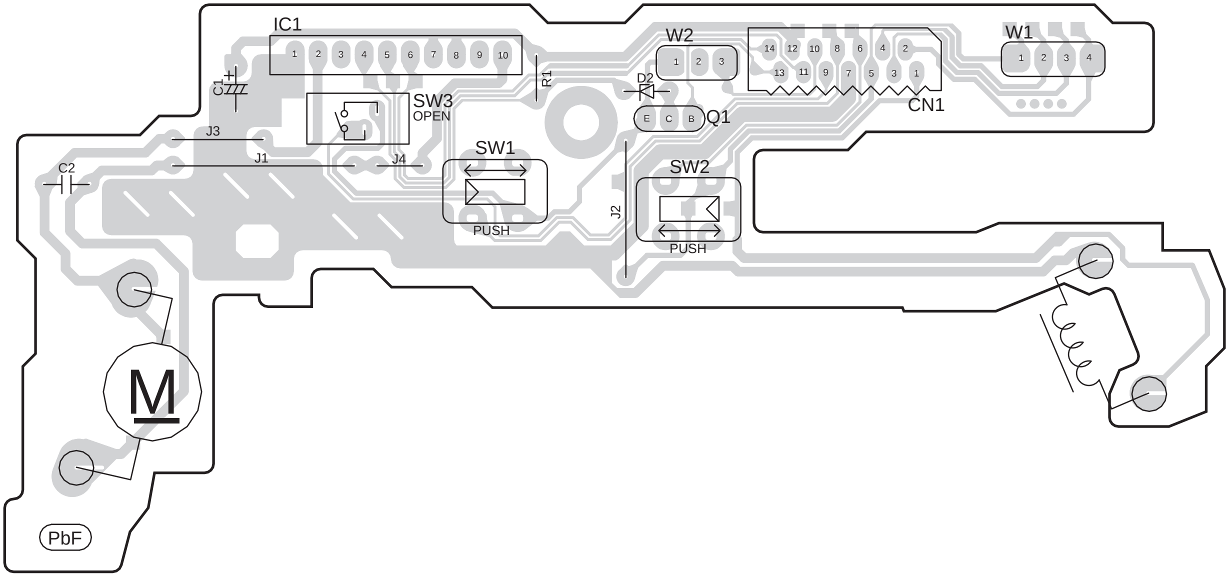

ACCESSORIES BAG
A1 REMOTE CONTROL
A2 AC CORD
A3 O/I BOOK
A4 FM ANTENNA
A5 AM LOOP ANTENNA
A1
A2
A3
A4
A5
P2 (RPNX0324)
*P2 (A)
* P2 (B)
PP BAND
(Not supplied)
Speaker Unit
SB-AK230
*P2 (A)
POLYFOAM A
VINYL BAG
(ACCESSORIES BAG)
P3 (Miramat Bag)
PRINTING FRONT
*P2 (B)
POLYFOAM B
Main Unit
SA-AK230
P1 (RPGX1465)

PRT0502 D/S/J/N/A/E

A B C D E F G

1 2 3 4 5 6 7 8 9

G CD LOADING P.C.B (REP2578A-N)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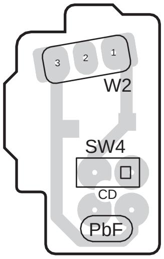
C1
R1
W2
1 2 3
D2
Q1
E C B
14 12 10 8 6 4 2
13 11 9 7 5 3 1
CN1
W1
1 2 3 4
SW3
OPEN
J3
J1
J4
C2
SW1
PUSH
SW2
PUSH
J2
M
PbF

E CD DETECT P.C.B (REP2578A-N)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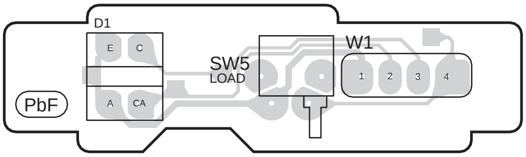
W2
SW4
CD
PbF

F SPINDLE POSITION P.C.B (REP2578A-N)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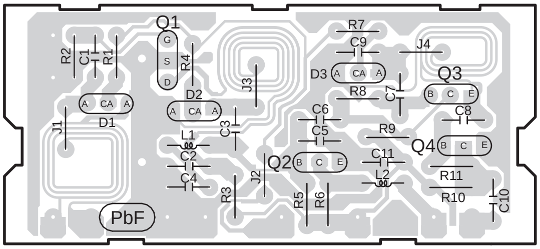
E C
A CA
SW5
LOAD
W1
1 2 3 4
PbF

K TUNER PACK P.C.B (REP1999B)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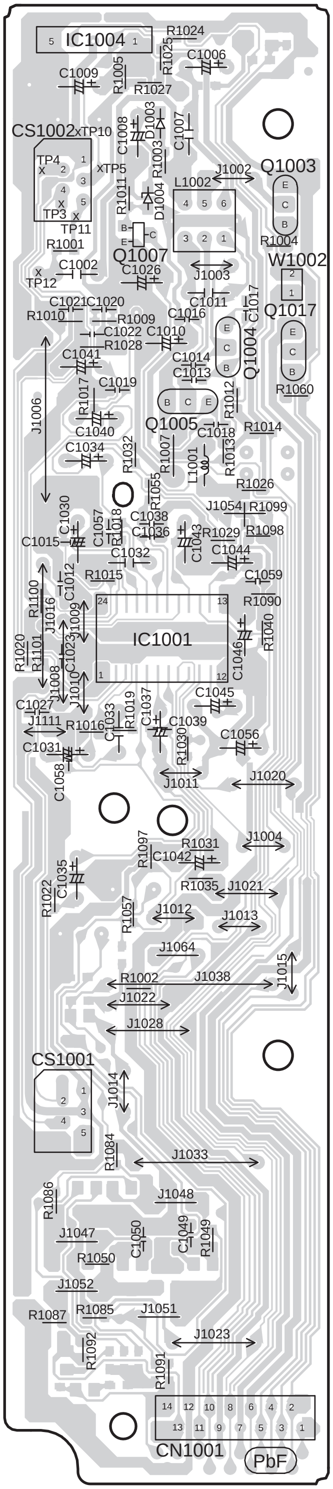
R2
C1
R1
R4
J3
R7
C9
J4
D3
A CA A
R8
C7
Q3
B C E
A CA A
D1
D2
A CA A
C3
C6
C5
C8
R9
Q4
B C E
J1
L1
C2
C4
Q2
B C E
C11
L2
R11
R10
C10
J2
R3
R5
R6
PbF

I DECK P.C.B (REPX0331D)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C1006
C1009
R1005
R1027
CS1002
TP10
C1008
D1003
C1007
R1003
TP4
TP5
TP3
TP11
R1011
D1004
L1002
J1002
Q1003
R1001
R1004
W1002
Q1007
TP12
C1002
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J1003
C1021
C1020
R1010
R1009
C1016
C1011
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Q1017
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Q1004
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J1006
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R1018
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J1008
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C1027
C1045
J1111
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C1031
R1030
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J1011
J1020
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R1031
J1004
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R1049
R1050
J1052
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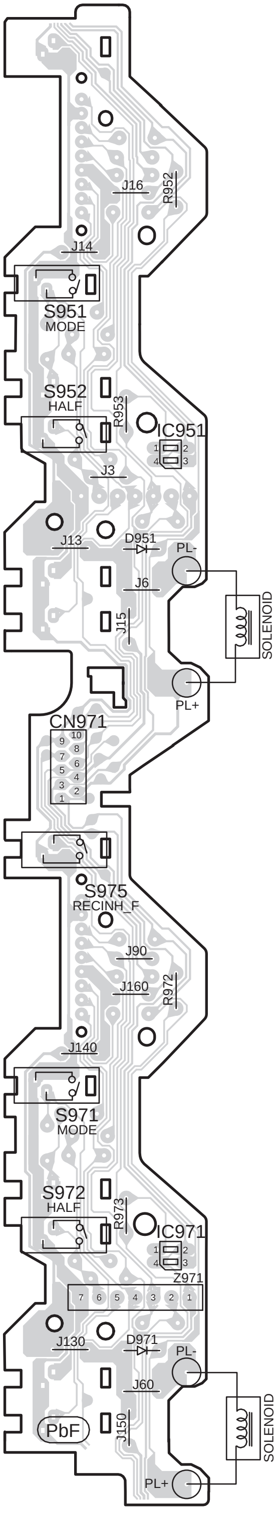
CN1001
PbF

J DECK MECHANISM P.C.B (REPX0321A)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R953
IC951
J3
J13
D951
PL-
J6
J15
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PL+
CN971
S975
RECINH_F
J90
J160
R972
J140
S971
MODE
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HALF
R973
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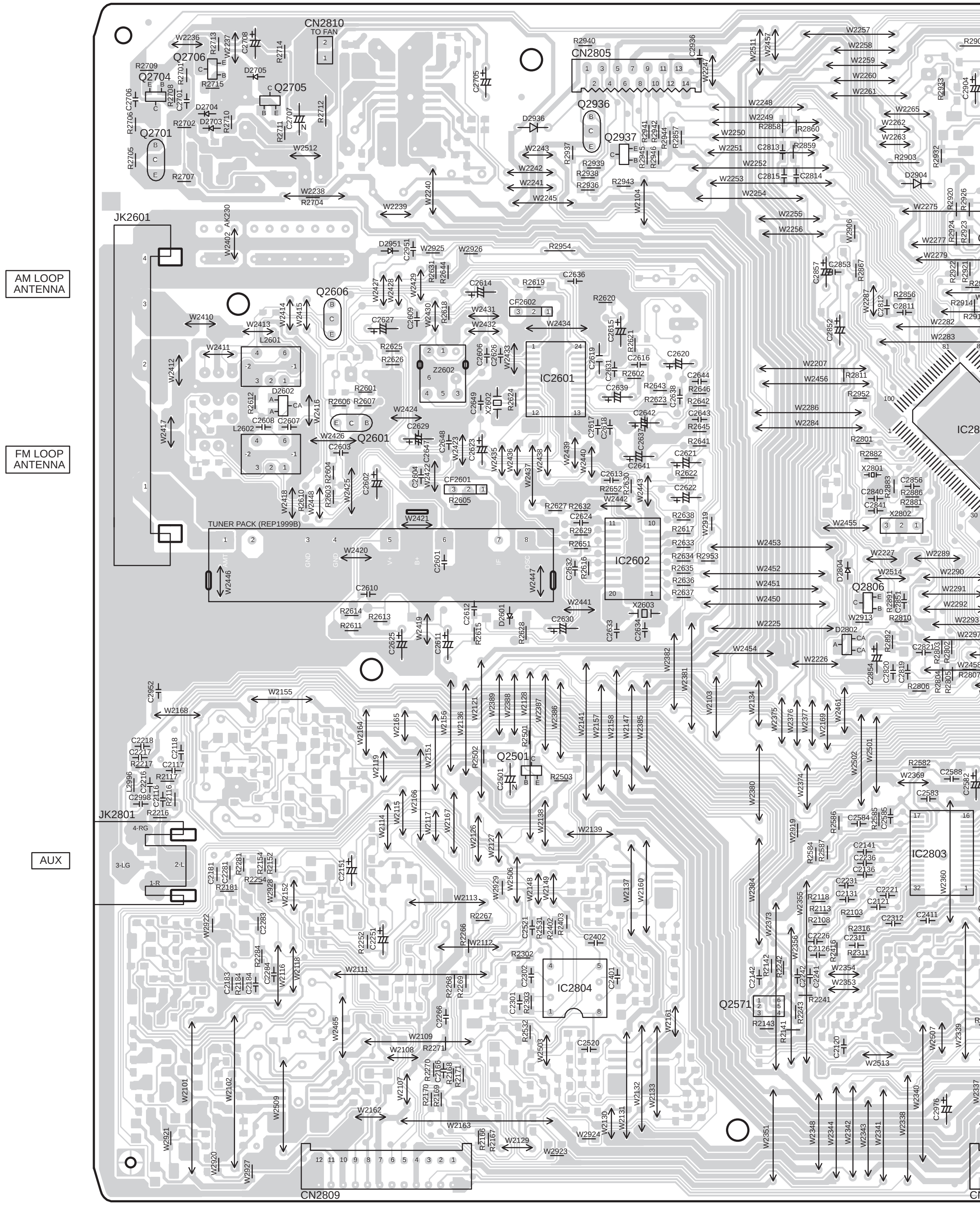
SOLENOID
PbF
PL+

B MAIN P.C.B (REPX0442R)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CN2810
TO FAN
CN2805
CN2809
JK2601
JK2801
AM LOOP ANTENNA
FM LOOP ANTENNA
AUX
TUNER PACK (REP1999B)
IC2601
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IC2803
IC2804
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Q2704
Q2705
Q2706
Q2936
Q2937
Q2606
Q2601
Q2501
Q2571
Q2806
L2601
L2602
Z2602
CF2601
CF2602
X2602
X2603
X2801
X2802
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AK230
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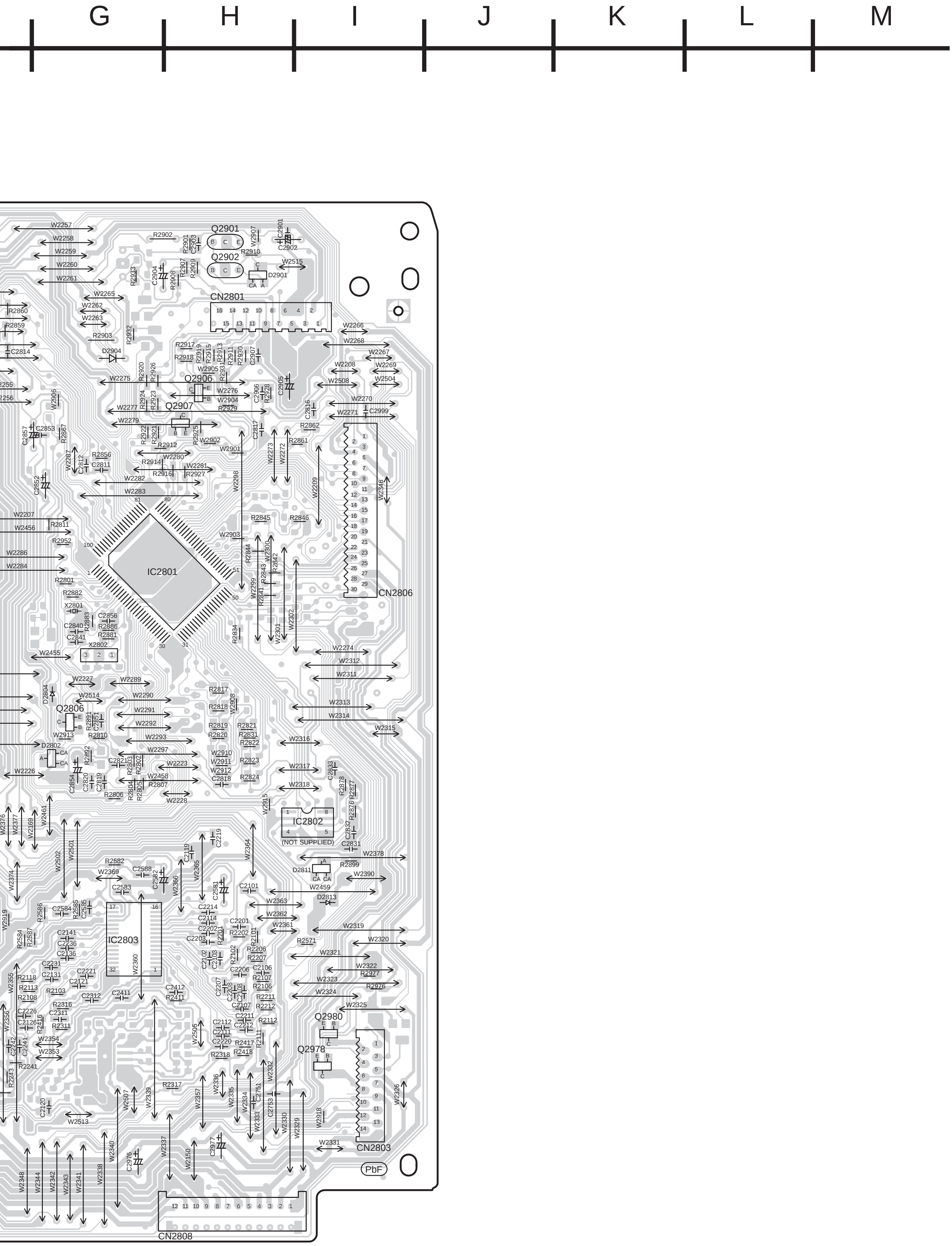
3-LG
2-L
1-R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D2904
D2802
D2804
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D2813
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CN2806
CN2803
CN2808
IC2801
IC2802
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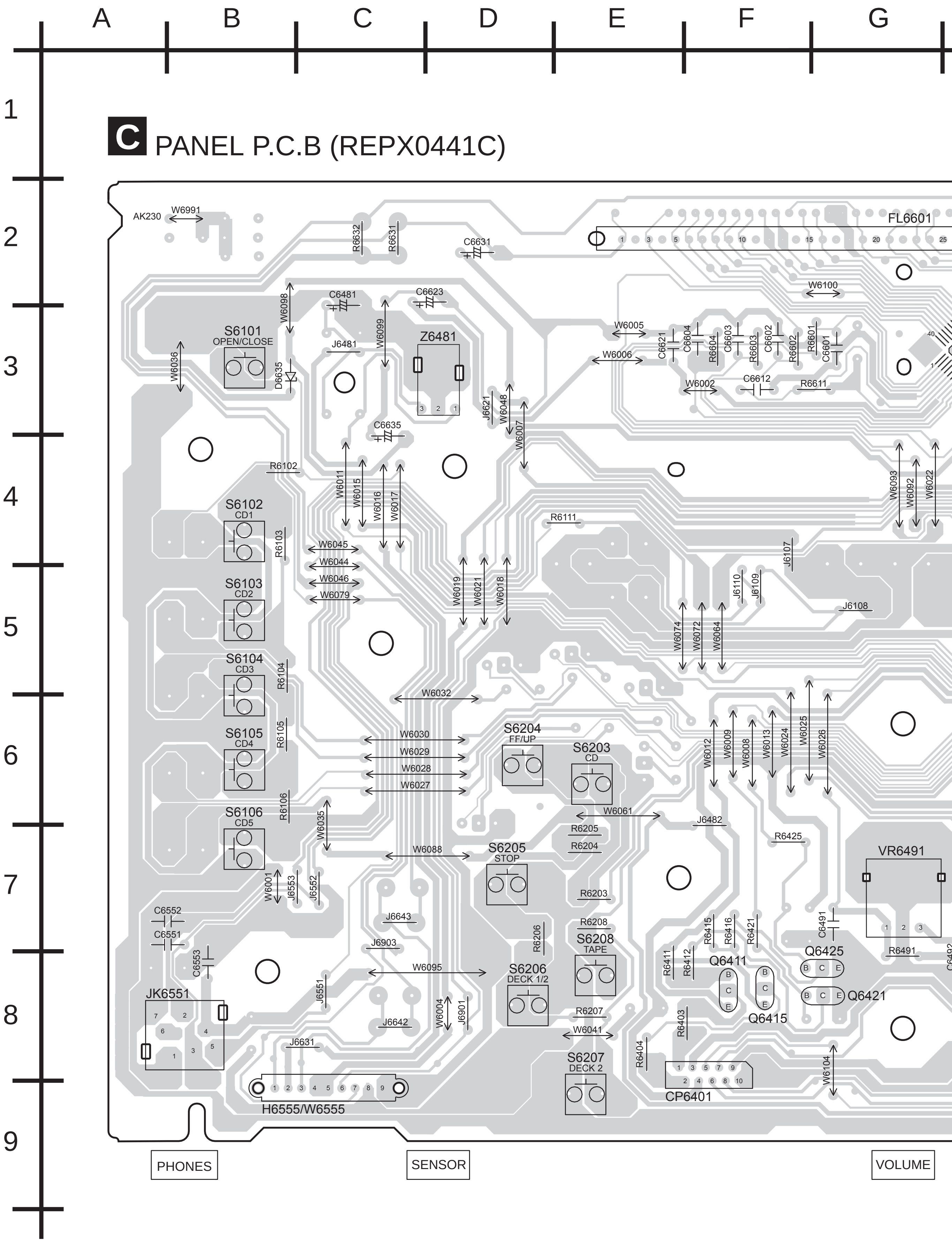
PbF

C PANEL P.C.B (REPX0441C)



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S6208
TAPE
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R6416
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B
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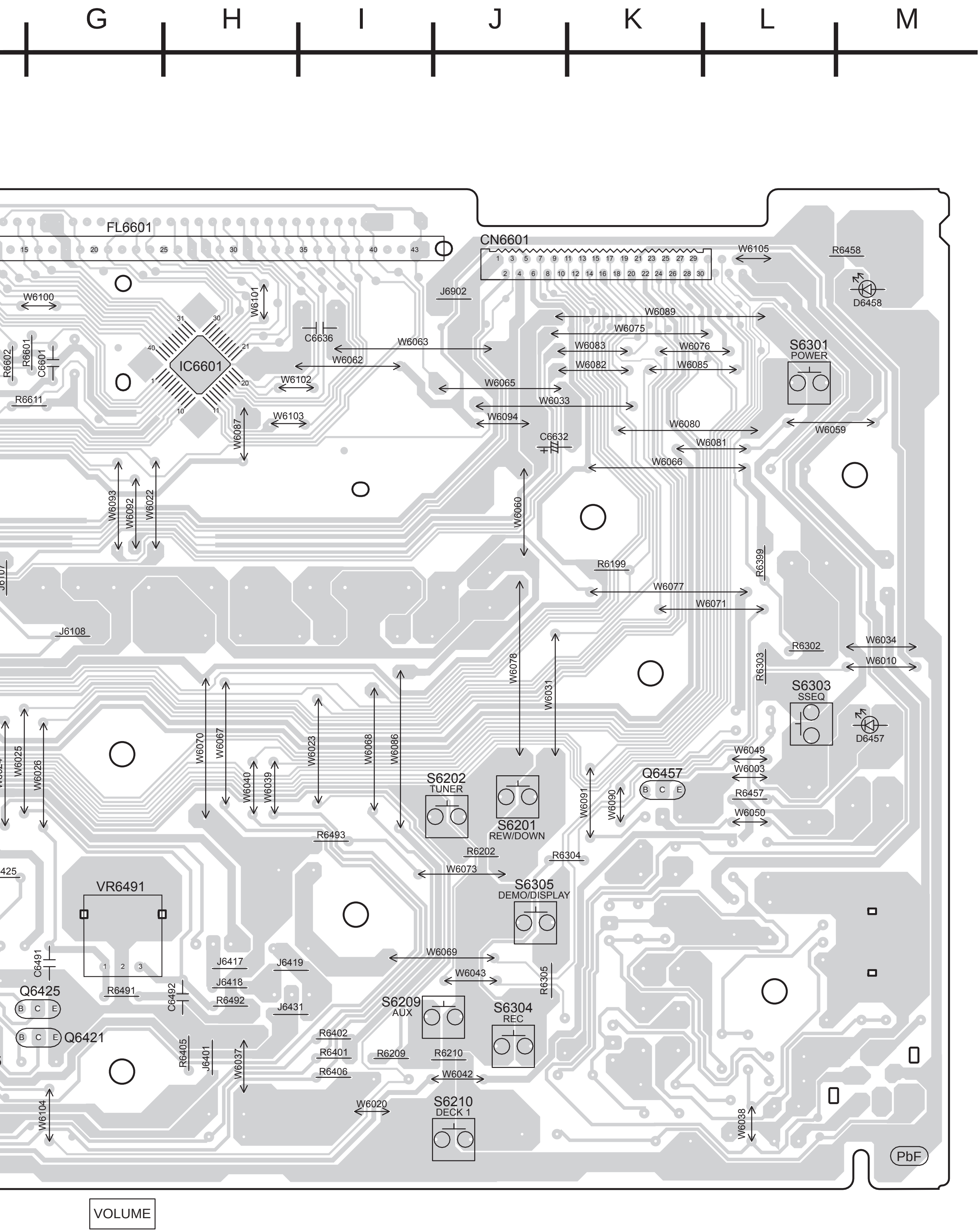
PHONES
SENSOR
VOLUME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J6902
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W6050
Q6457
B C E
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TUNER
S6201
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W6090
R6493
R6202
R6304
W6073
S6305
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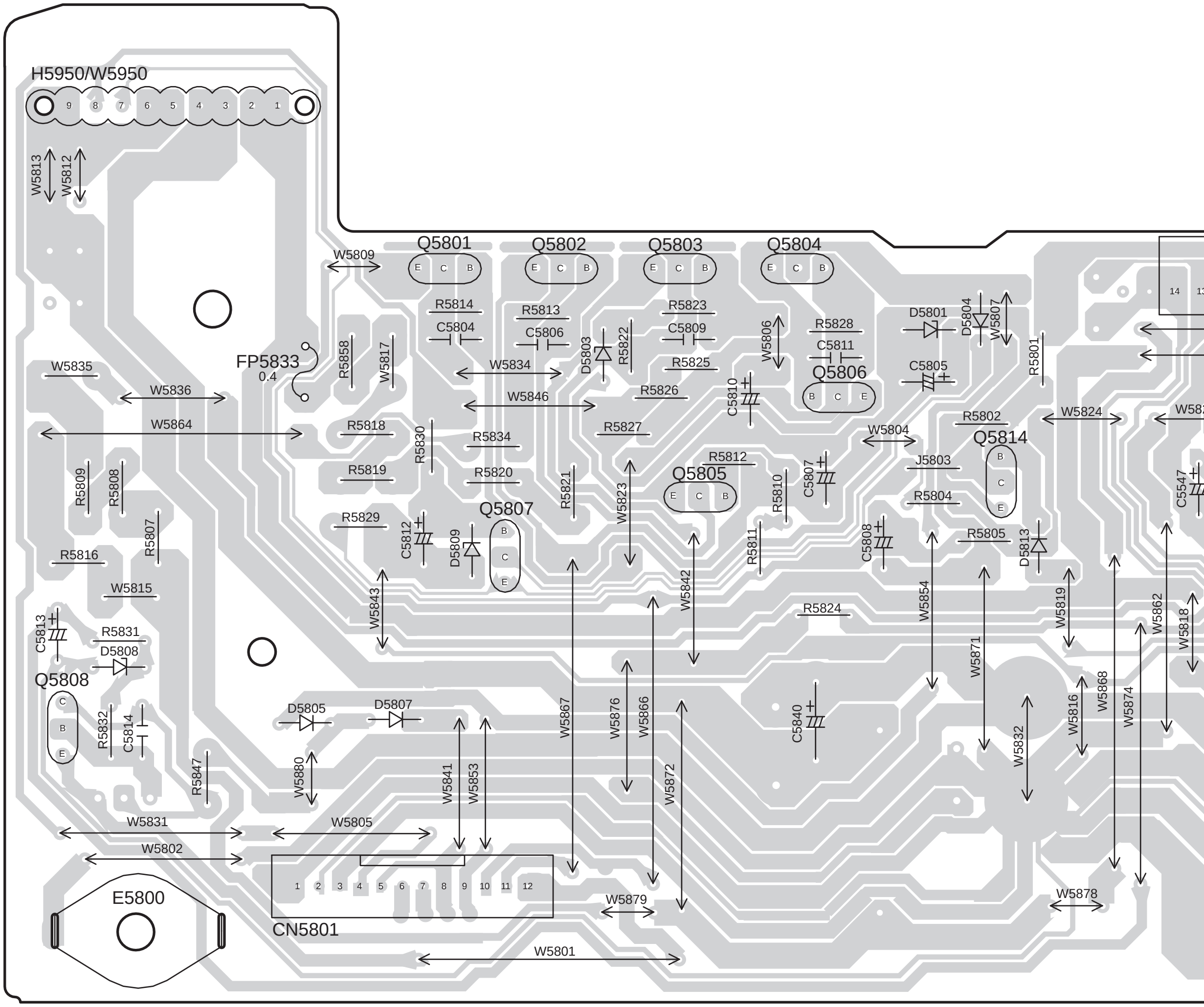
PbF
VOLUME

H POWER P.C.B (REPX0469H)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W5872
W5831
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W5802
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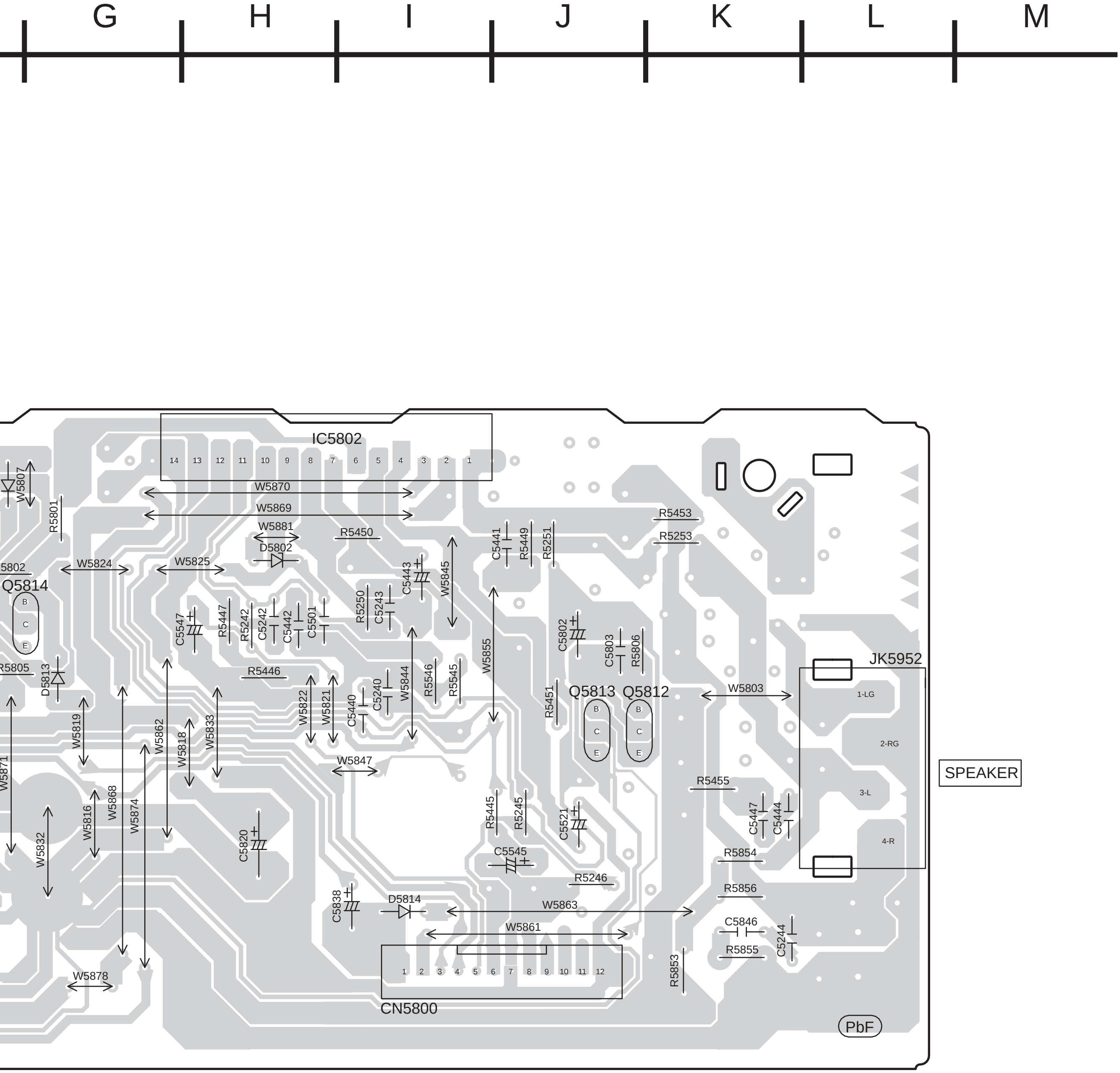
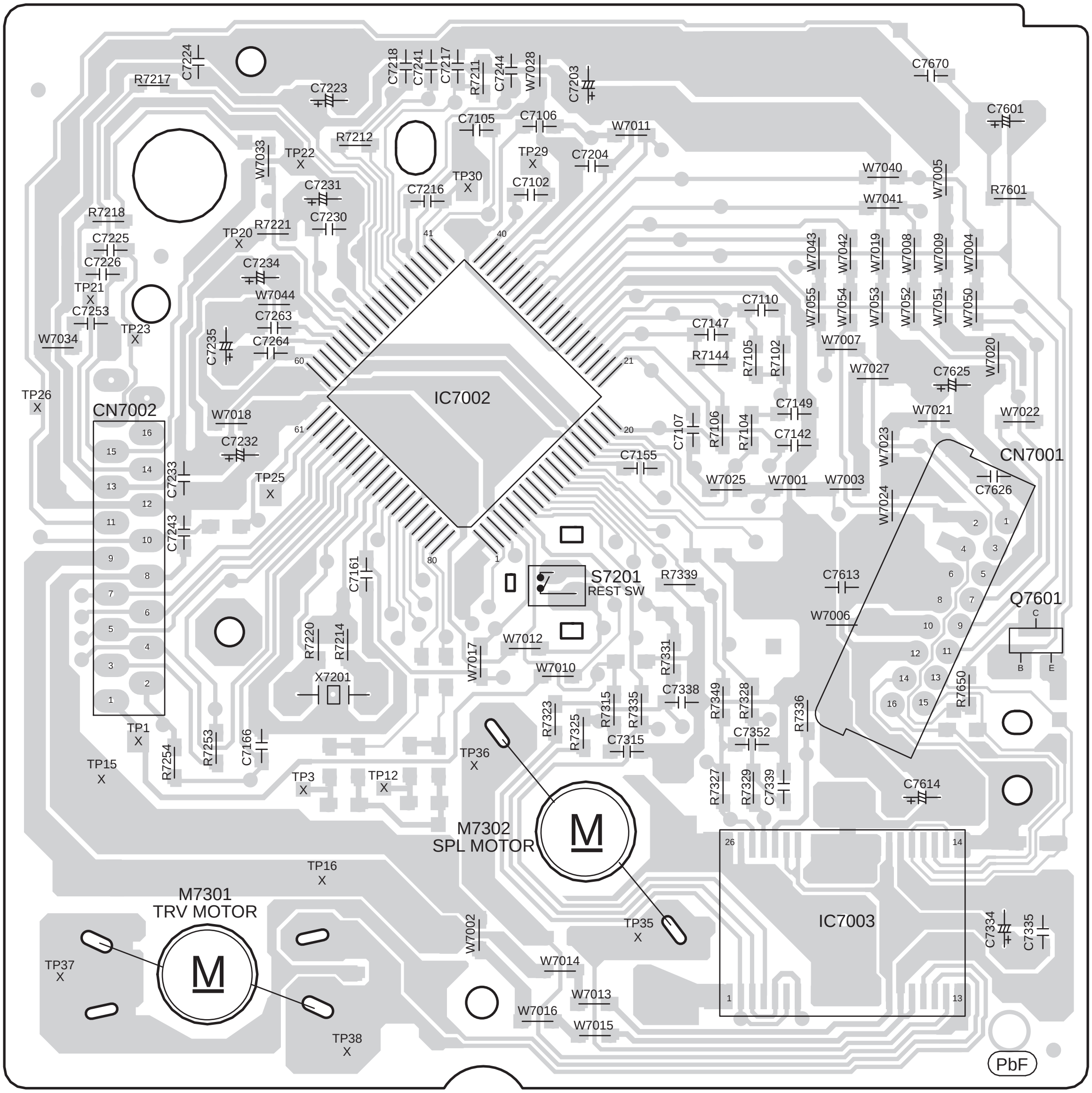
W5801
14
13



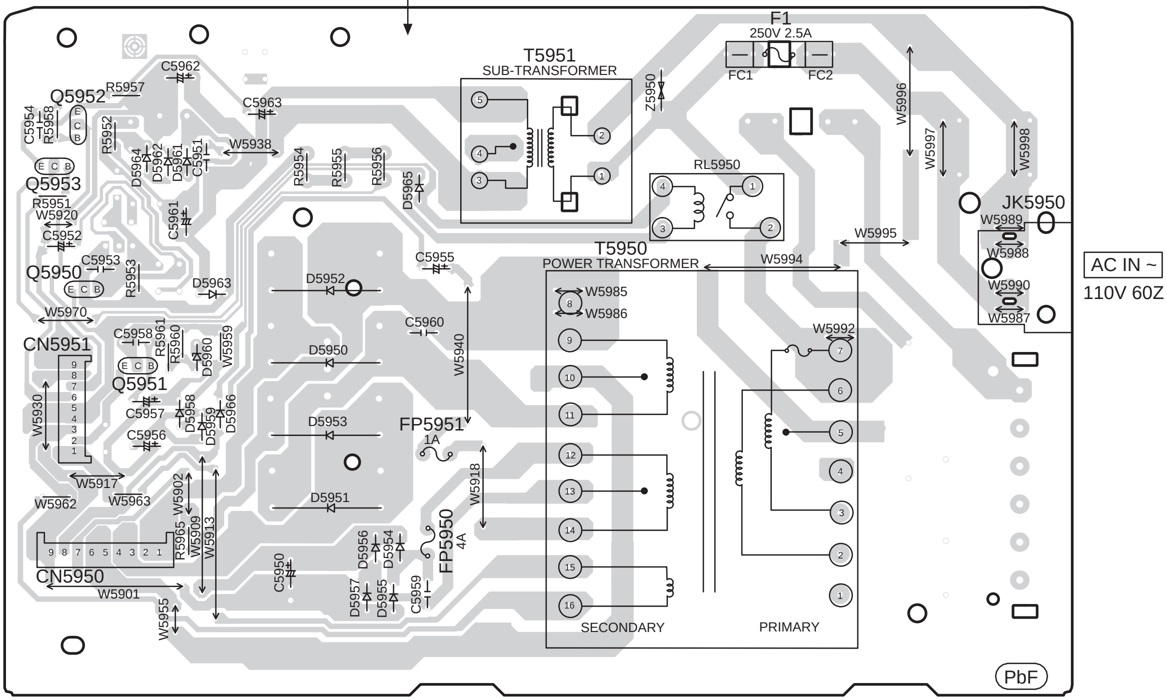
G
H
I
J
K
L
M
IC5802
14
13
12
11
10
9
8
7
6
5
4
3
2
1
W5807
R5801
W5870
W5869
W5881
D5802
R5450
R5453
R5253
C5441
R5449
R5251
5802
W5824
W5825
Q5814
B
C
E
C5547
R5447
R5242
C5242
C5442
C5501
R5250
C5243
C5443
W5845
W5855
C5802
C5803
R5806
JK5952
R5805
D5813
R5446
W5822
W5821
C5440
C5240
W5844
R5546
R5545
R5451
Q5813
Q5812
W5803
1-LG
2-RG
3-L
4-R
SPEAKER
W5871
W5819
W5862
W5818
W5833
W5847
R5455
W5832
W5816
W5868
W5874
C5820
R5445
R5245
C5521
C5447
C5444
C5545
R5854
R5246
R5856
C5838
D5814
W5863
C5846
W5861
C5244
R5855
R5853
W5878
CN5800
PbF

A CD SERVO P.C.B (REPX0443A)

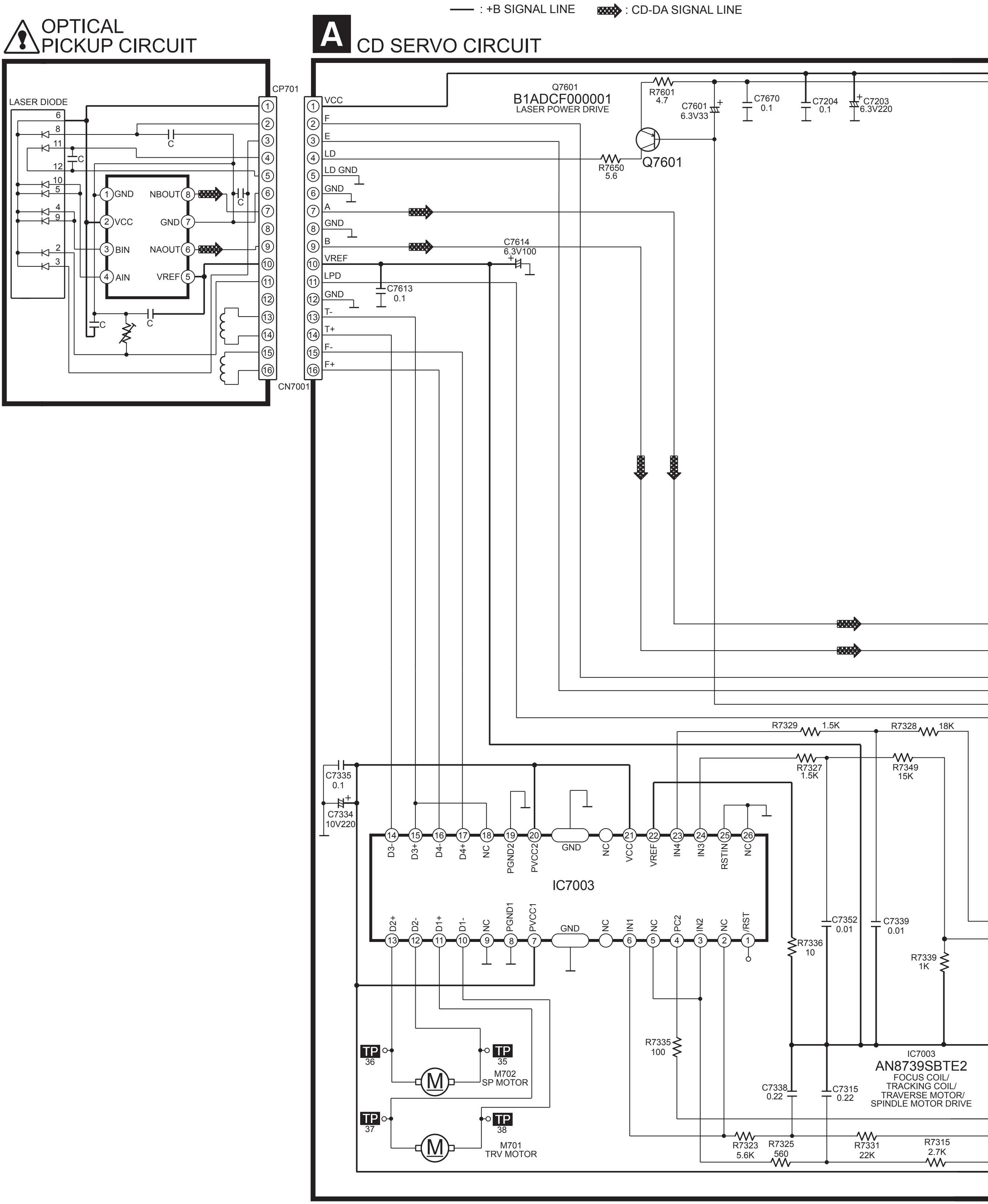

A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
C7224
R7217
C7223
C7218
C7241
C7217
R7211
C7244
W7028
C7203
C7670
C7601
C7105
C7106
W7011
R7212
W7033
TP22
TP29
C7204
C7231
C7216
TP30
C7102
W7040
W7005
R7601
W7041
R7218
C7225
C7226
R7221
TP20
C7230
41
40
C7234
W7043
W7042
W7019
W7008
W7009
W7004
TP21
C7253
W7044
C7263
TP23
W7034
C7235
C7264
60
W7055
W7054
W7053
W7052
W7051
W7050
C7110
C7147
R7144
R7105
R7102
W7007
W7027
C7625
W7020
21
TP26
IC7002
CN7002
W7018
61
C7149
C7107
R7106
R7104
C7142
20
W7021
W7022
C7232
W7023
CN7001
C7233
C7155
TP25
W7025
W7001
W7003
C7626
W7024
C7243
80
1
C7161
S7201
REST SW
R7339
C7613
W7006
Q7601
C
B
E
R7220
R7214
W7012
W7017
W7010
R7331
X7201
C7338
R7349
R7328
R7650
R7323
R7315
R7335
R7336
TP1
R7254
R7253
C7166
TP36
R7325
C7315
C7352
TP15
TP3
TP12
R7327
R7329
C7339
C7614
M7302
SPL MOTOR
M
26
14
TP16
M7301
TRV MOTOR
IC7003
C7334
C7335
TP37
M
W7002
TP35
W7014
W7013
TP38
W7016
W7015
13
PbF

D TRANSFORMER P.C.B (REPX0468C)

CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE.
PLEASE DO NOT TOUCH THIS P.C.B


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
F1
250V 2.5A
FC1
FC2
T5951
SUB-TRANSFORMER
Z5950
W5996
W5997
W5998
RL5950
JK5950
W5989
W5988
W5990
W5987
AC IN ~
110V 60Z
W5995
T5950
POWER TRANSFORMER
W5994
W5985
W5986
W5992
SECONDARY
PRIMARY
PbF
C5962
C5963
R5957
Q5952
C5954
R5958
R5952
D5964
D5962
D5961
C5951
W5938
R5954
R5955
R5956
D5965
Q5953
R5951
W5920
C5952
C5961
C5953
Q5950
R5953
D5963
D5952
C5955
W5970
C5958
R5961
R5960
D5960
W5959
C5960
CN5951
Q5951
D5950
W5940
W5930
C5957
D5958
D5959
D5966
C5956
D5953
FP5951
1A
W5917
W5902
W5909
W5913
W5918
D5951
W5962
W5963
R5965
D5956
D5954
FP5950
4A
CN5950
W5901
C5950
D5957
D5955
C5959
W5955
E C B

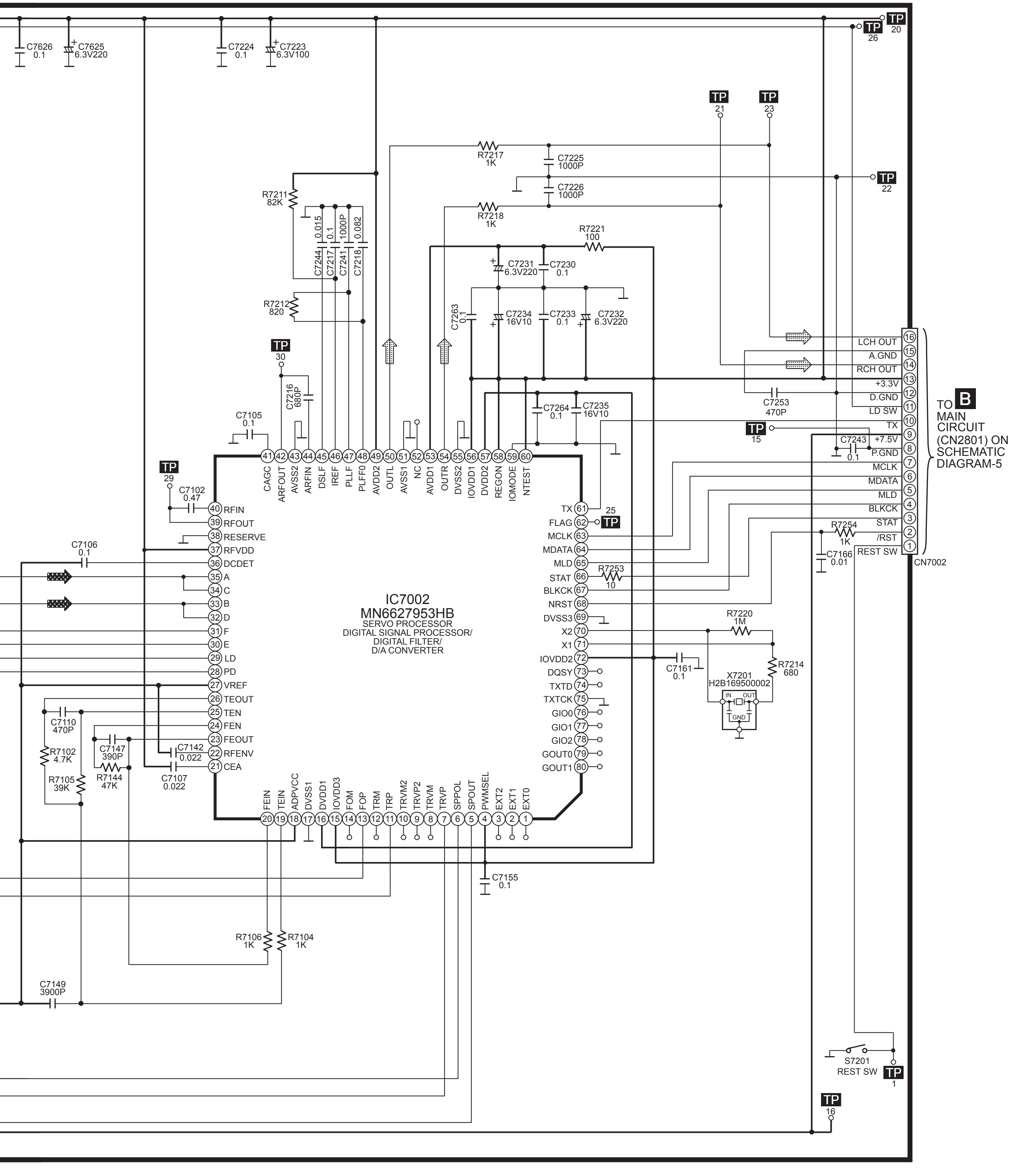
SCHEMATIC DIAGRAM - 1


: +B SIGNAL LINE
: CD-DA SIGNAL LINE
OPTICAL PICKUP CIRCUIT
A
CD SERVO CIRCUIT
LASER DIODE
CP701
CN7001
GND
VCC
BIN
AIN
NBOUT
GND
NAOUT
VREF
C
VCC
F
E
LD
LD GND
GND
A
GND
B
VREF
LPD
GND
T-
T+
F-
F+
Q7601
B1ADCF000001
LASER POWER DRIVE
Q7601
R7601
4.7
C7601
6.3V33
C7670
0.1
C7204
0.1
C7203
6.3V220
R7650
5.6
C7614
6.3V100
C7613
0.1
C7335
0.1
C7334
10V220
IC7003
D3-
D3+
D4-
D4+
NC
PGND2
PVCC2
GND
NC
VCC
VREF
IN4
IN3
RSTIN
NC
D2+
D2-
D1+
D1-
NC
PGND1
PVCC1
GND
NC
IN1
NC
PC2
IN2
NC
/RST
R7329
1.5K
R7328
18K
R7327
1.5K
R7349
15K
C7352
0.01
C7339
0.01
R7336
10
R7339
1K
R7335
100
IC7003
AN8739SBTE2
FOCUS COIL/
TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
C7338
0.22
C7315
0.22
R7323
5.6K
R7325
560
R7331
22K
R7315
2.7K
TP
36
TP
35
M702
SP MOTOR
TP
37
TP
38
M701
TRV MOTOR
M
M

SCHEMATIC DIAGRAM - 2

—— : +B SIGNAL LINE ▨ : CD-DA SIGNAL LINE ⇨ : CD SIGNAL LINE

A CD SERVO CIRCUIT



C7626 0.1
C7625 6.3V220
C7224 0.1
C7223 6.3V100
TP 20
TP 26
TP 21
TP 23
TP 22
R7217 1K
C7225 1000P
C7226 1000P
R7218 1K
R7211 82K
C7244 0.015
C7217 0.1
C7241 1000P
C7218 0.082
R7221 100
C7231 6.3V220
C7230 0.1
R7212 820
C7263 0.1
C7234 16V10
C7233 0.1
C7232 6.3V220
TP 30
C7216 680P
C7105 0.1
C7264 0.1
C7235 16V10
TP 15
TP 29
C7102 0.47
TP 25
C7106 0.1
C7253 470P
C7243 0.1
R7254 1K
C7166 0.01
LCH OUT 16
A.GND 15
RCH OUT 14
+3.3V 13
D.GND 12
LD SW 11
TX 10
+7.5V 9
P.GND 8
MCLK 7
MDATA 6
MLD 5
BLKCK 4
STAT 3
/RST 2
REST SW 1
CN7002
TO B MAIN CIRCUIT (CN2801) ON SCHEMATIC DIAGRAM-5
41 CAGC
42 ARFOUT
43 AVSS2
44 ARFIN
45 DSLF
46 IREF
47 PLLF
48 PLFF0
49 AVDD2
50 OUTL
51 AVSS1
52 NC
53 AVDD1
54 OUTR
55 DVSS2
56 IOVDD1
57 DVDD2
58 REGON
59 IOMODE
60 NTEST
40 RFIN
39 RFOUT
38 RESERVE
37 RFVDD
36 DCDET
35 A
34 C
33 B
32 D
31 F
30 E
29 LD
28 PD
27 VREF
26 TEOUT
25 TEN
24 FEN
23 FEOUT
22 RFENV
21 CEA
61 TX
62 FLAG
63 MCLK
64 MDATA
65 MLD
66 STAT
67 BLKCK
68 NRST
69 DVSS3
70 X2
71 X1
72 IOVDD2
73 DQSY
74 TXTD
75 TXTCK
76 GIO0
77 GIO1
78 GIO2
79 GOUT0
80 GOUT1
20 FEIN
19 TEIN
18 ADPVCC
17 DVSS1
16 DVDD1
15 IOVDD3
14 FOM
13 FOP
12 TRM
11 TRP
10 TRVM2
9 TRVP2
8 TRVM
7 TRVP
6 SPPOL
5 SPOUT
4 PWMSEL
3 EXT2
2 EXT1
1 EXT0
IC7002
MN6627953HB
SERVO PROCESSOR
DIGITAL SIGNAL PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER
R7253 10
R7220 1M
C7161 0.1
R7214 680
X7201
H2B169500002
IN OUT GND
C7110 470P
R7102 4.7K
R7105 39K
C7147 390P
R7144 47K
C7142 0.022
C7107 0.022
C7155 0.1
R7106 1K
R7104 1K
C7149 3900P
S7201 REST SW
TP 1
TP 16

SCHEMATIC DIAGRAM - 3

—— : +B SIGNAL LINE

⇨ : FM SIGNAL LINE

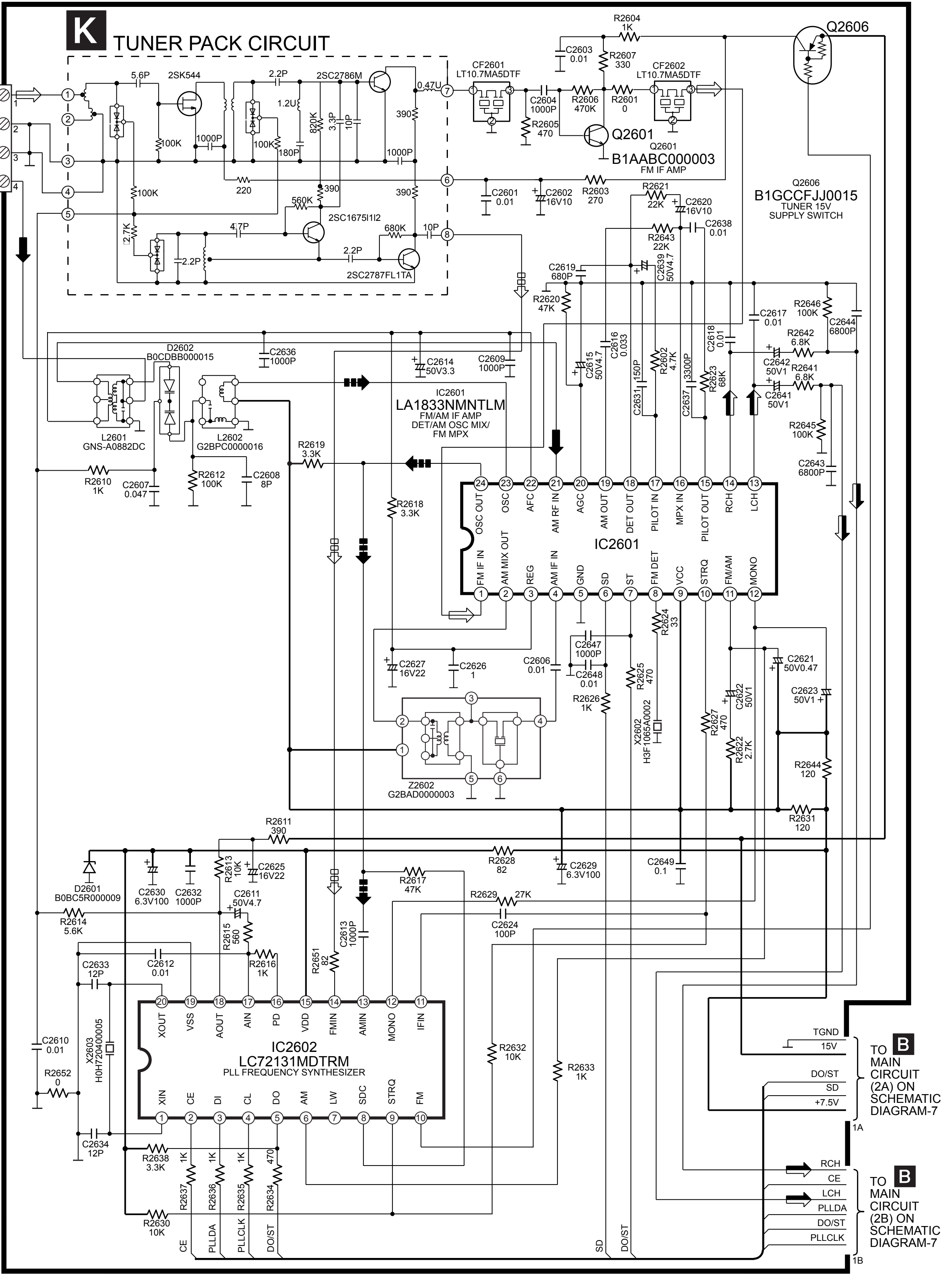
➡ : AM SIGNAL LINE

⇨ : FM/AM SIGNAL LINE

⇨ : FM OSC SIGNAL LINE

➡ : AM OSC SIGNAL LINE

B MAIN (TUNER) CIRCUIT


K TUNER PACK CIRCUIT
FM EXT ANT
75 OHM
GND
AM LOOP ANT
AM EXT ANT
JK2601
5.6P
2SK544
2.2P
2SC2786M
0.47U
1.2U
820K
3.3P
10P
390
100K
1000P
180P
220
560K
2SC1675I1I2
680K
2.7K
4.7P
2.2P
2SC2787FL1TA
CF2601 LT10.7MA5DTF
C2603 0.01
R2604 1K
R2607 330
CF2602 LT10.7MA5DTF
C2604 1000P
R2606 470K
R2601 0
R2605 470
Q2601
Q2601 B1AABC000003 FM IF AMP
Q2606
Q2606 B1GCCFJJ0015 TUNER 15V SUPPLY SWITCH
C2601 0.01
C2602 16V10
R2603 270
R2621 22K
C2620 16V10
R2643 22K
C2638 0.01
C2619 680P
C2639 50V4.7
R2620 47K
C2617 0.01
R2646 100K
C2644 6800P
R2642 6.8K
C2642 50V1
R2641 6.8K
C2641 50V1
R2645 100K
C2643 6800P
C2615 50V4.7
C2616 0.033
C2631 150P
R2602 4.7K
C2637 3300P
C2618 0.01
R2623 68K
D2602 B0CDBB000015
C2636 1000P
C2614 50V3.3
C2609 1000P
L2601 GNS-A0882DC
L2602 G2BPC0000016
IC2601 LA1833NMNTLM FM/AM IF AMP DET/AM OSC MIX/ FM MPX
R2619 3.3K
R2610 1K
C2607 0.047
R2612 100K
C2608 8P
R2618 3.3K
OSC OUT
OSC
AFC
AM RF IN
AGC
AM OUT
DET OUT
PILOT IN
MPX IN
PILOT OUT
RCH
LCH
IC2601
FM IF IN
AM MIX OUT
REG
AM IF IN
GND
SD
ST
FM DET
VCC
STRQ
FM/AM
MONO
C2647 1000P
C2648 0.01
R2624 33
C2621 50V0.47
C2627 16V22
C2626 1
C2606 0.01
R2625 470
R2626 1K
X2602 H3F1065A0002
R2627 470
C2622 50V1
C2623 50V1
R2622 2.7K
R2644 120
Z2602 G2BAD0000003
R2631 120
R2611 390
R2628 82
C2629 6.3V100
C2649 0.1
D2601 B0BC5R000009
C2630 6.3V100
C2632 1000P
R2613 10K
C2625 16V22
R2617 47K
C2611 50V4.7
R2629 27K
C2624 100P
R2614 5.6K
R2615 560
R2616 1K
R2651 82
C2613 1000P
C2633 12P
C2612 0.01
C2610 0.01
X2603 H0H720400005
R2652 0
IC2602 LC72131MDTRM PLL FREQUENCY SYNTHESIZER
XOUT
VSS
AOUT
AIN
PD
VDD
FMIN
AMIN
MONO
IFIN
XIN
CE
DI
CL
DO
AM
LW
SDC
STRQ
FM
R2632 10K
R2633 1K
C2634 12P
R2638 3.3K
R2637 1K
R2636 1K
R2635 1K
R2634 470
R2630 10K
CE
PLLDA
PLLCLK
DO/ST
SD
DO/ST
TGND
15V
DO/ST
SD
+7.5V
TO B MAIN CIRCUIT (2A) ON SCHEMATIC DIAGRAM-7
1A
RCH
CE
LCH
PLLDA
DO/ST
PLLCLK
TO B MAIN CIRCUIT (2B) ON SCHEMATIC DIAGRAM-7
1B

SCHEMATIC DIAGRAM - 4

— : +B SIGNAL LINE

– – : -B SIGNAL LINE

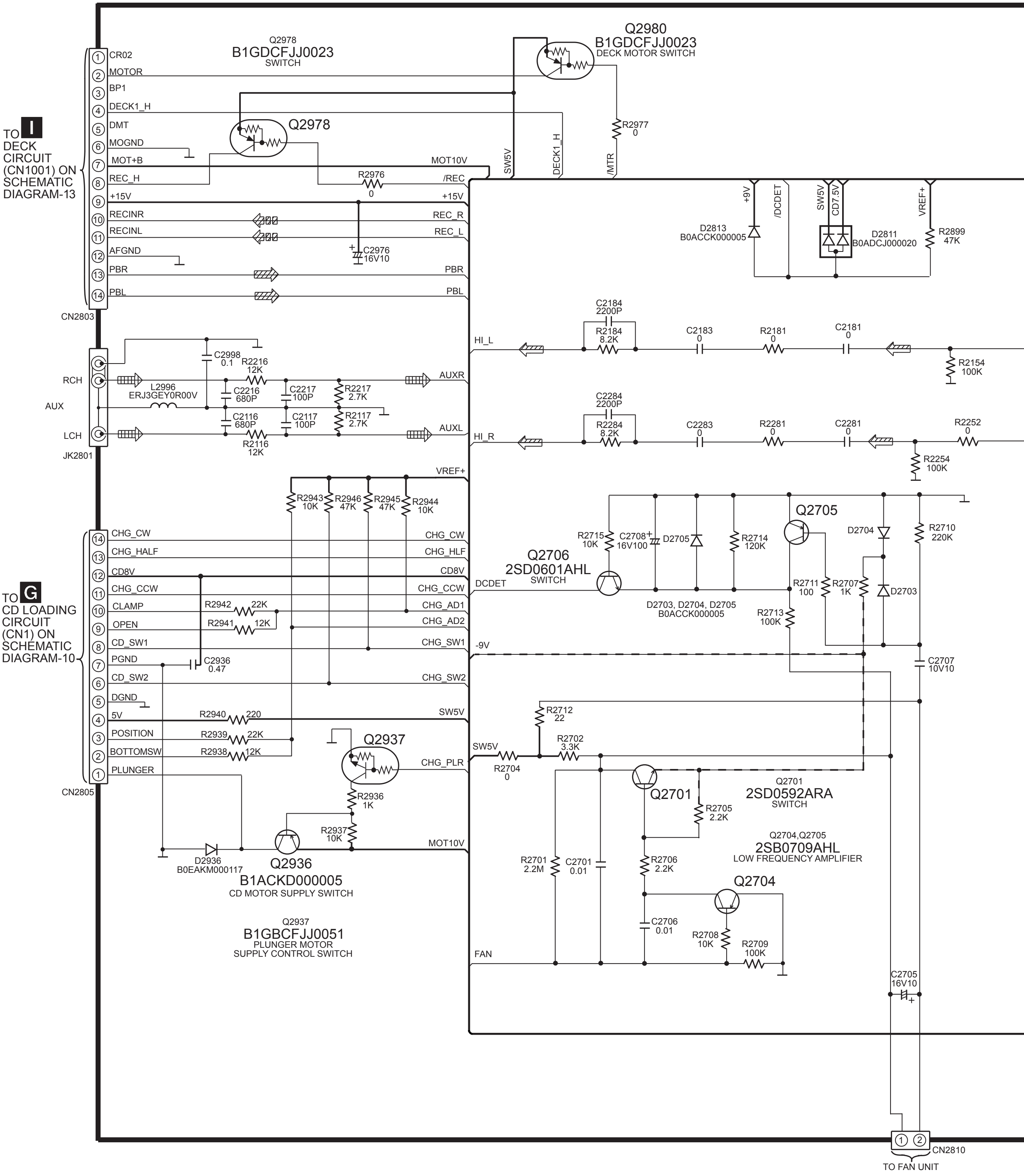
▨⇨ : PLAYBACK SIGNAL LINE

▨⇨ : RECORD SIGNAL LINE

▥⇨ : AUX SIGNAL LINE

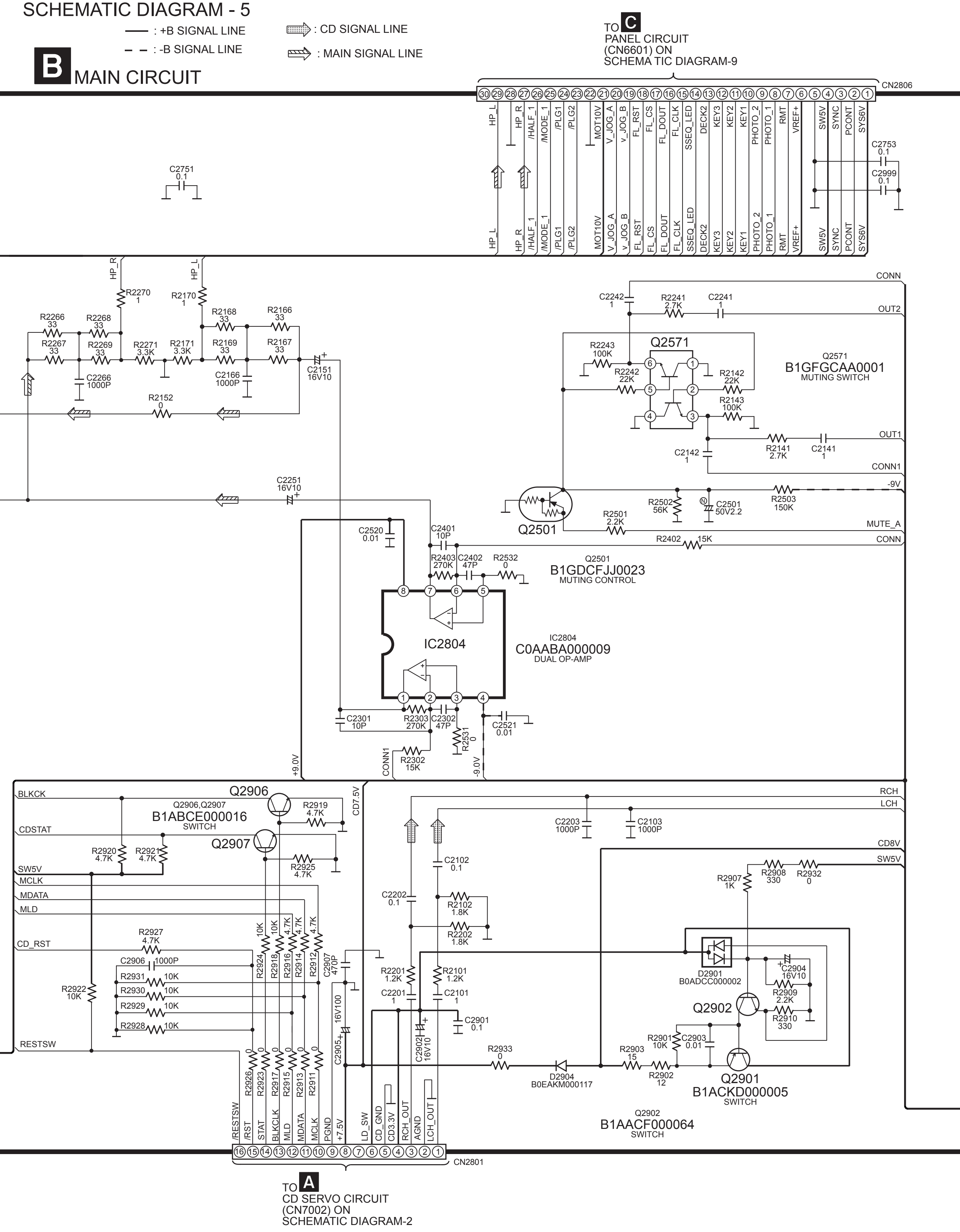
⇨ : MAIN SIGNAL LINE

B MAIN CIRCUIT



TO I DECK CIRCUIT (CN1001) ON SCHEMATIC DIAGRAM-13
CN2803
① CR02
② MOTOR
③ BP1
④ DECK1_H
⑤ DMT
⑥ MOGND
⑦ MOT+B
⑧ REC_H
⑨ +15V
⑩ RECINR
⑪ RECINL
⑫ AFGND
⑬ PBR
⑭ PBL
Q2978
B1GDCFJJ0023
SWITCH
Q2978
Q2980
B1GDCFJJ0023
DECK MOTOR SWITCH
R2977
0
SW5V
DECK1_H
/MTR
MOT10V
R2976
0
/REC
+15V
REC_R
REC_L
C2976
16V10
PBR
PBL
+9V
/DCDET
SW5V
CD7.5V
VREF+
D2813
B0ACCK000005
D2811
B0ADCJ000020
R2899
47K
RCH
AUX
LCH
JK2801
C2998
0.1
R2216
12K
L2996
ERJ3GEY0R00V
C2216
680P
C2217
100P
R2217
2.7K
AUXR
C2116
680P
C2117
100P
R2117
2.7K
R2116
12K
AUXL
C2184
2200P
R2184
8.2K
HI_L
C2183
0
R2181
0
C2181
0
R2154
100K
C2284
2200P
R2284
8.2K
HI_R
C2283
0
R2281
0
C2281
0
R2252
0
R2254
100K
VREF+
R2943
10K
R2946
47K
R2945
47K
R2944
10K
TO G CD LOADING CIRCUIT (CN1) ON SCHEMATIC DIAGRAM-10
CN2805
⑭ CHG_CW
⑬ CHG_HALF
⑫ CD8V
⑪ CHG_CCW
⑩ CLAMP
⑨ OPEN
⑧ CD_SW1
⑦ PGND
⑥ CD_SW2
⑤ DGND
④ 5V
③ POSITION
② BOTTOMSW
① PLUNGER
CHG_CW
CHG_HLF
CD8V
CHG_CCW
CHG_AD1
CHG_AD2
CHG_SW1
CHG_SW2
SW5V
CHG_PLR
MOT10V
R2942
22K
R2941
12K
C2936
0.47
R2940
220
R2939
22K
R2938
12K
Q2937
R2936
1K
R2937
10K
D2936
B0EAKM000117
Q2936
B1ACKD000005
CD MOTOR SUPPLY SWITCH
Q2937
B1GBCFJJ0051
PLUNGER MOTOR
SUPPLY CONTROL SWITCH
Q2705
R2715
10K
C2708
16V100
D2705
R2714
120K
D2704
R2710
220K
Q2706
2SD0601AHL
SWITCH
DCDET
R2711
100
R2707
1K
D2703
D2703, D2704, D2705
B0ACCK000005
R2713
100K
-9V
C2707
10V10
R2712
22
SW5V
R2702
3.3K
R2704
0
Q2701
Q2701
2SD0592ARA
SWITCH
R2705
2.2K
Q2704,Q2705
2SB0709AHL
LOW FREQUENCY AMPLIFIER
R2701
2.2M
C2701
0.01
R2706
2.2K
Q2704
C2706
0.01
R2708
10K
R2709
100K
FAN
C2705
16V10
① ②
CN2810
TO FAN UNIT

SCHEMATIC DIAGRAM - 5

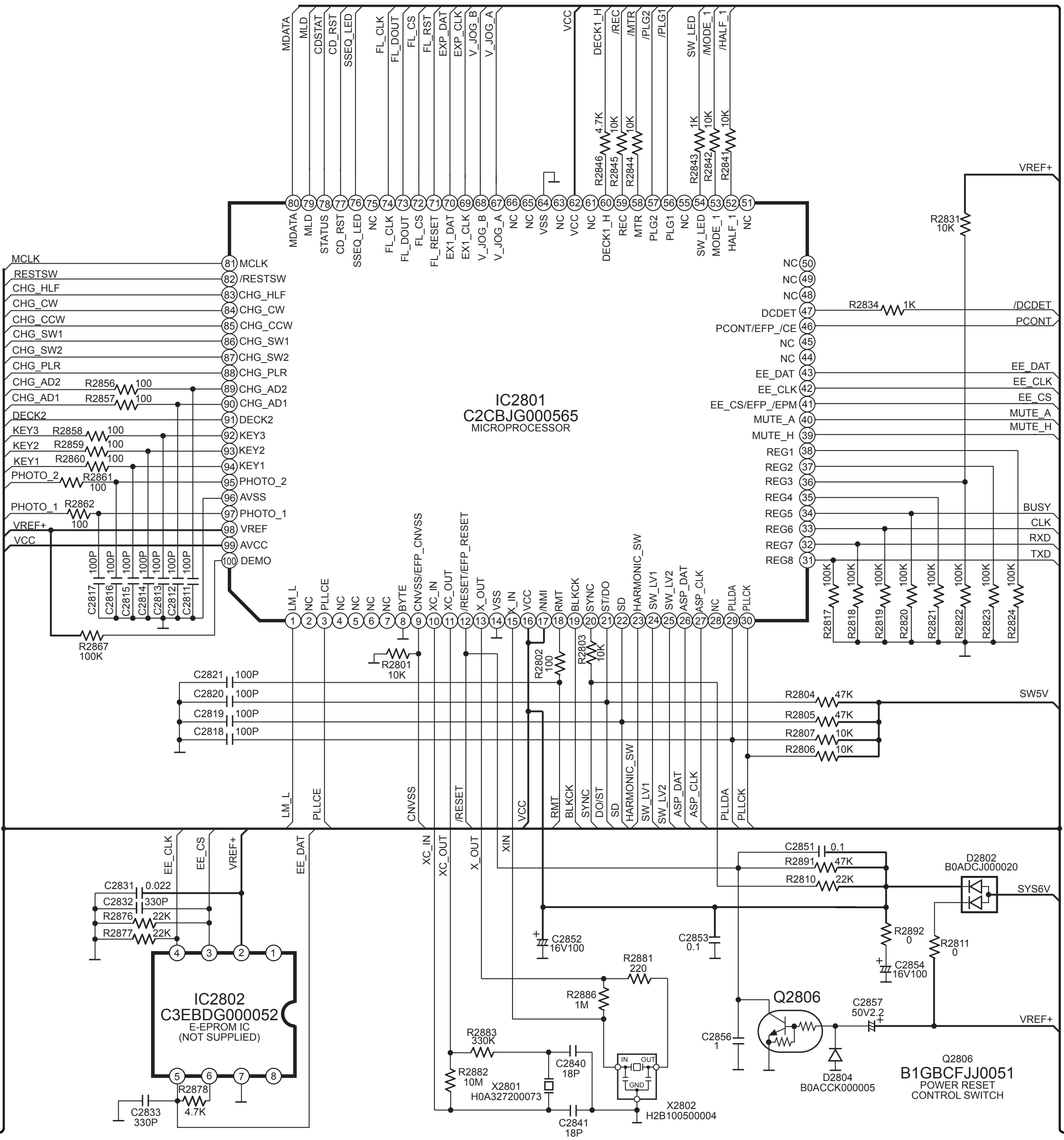


: +B SIGNAL LINE
: -B SIGNAL LINE
: CD SIGNAL LINE
: MAIN SIGNAL LINE
B MAIN CIRCUIT
TO C PANEL CIRCUIT (CN6601) ON SCHEMA TIC DIAGRAM-9
CN2806
30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
HP_L
HP_R
/HALF_1
/MODE_1
/PLG1
/PLG2
MOT10V
V_JOG_A
v_JOG_B
FL_RST
FL_CS
FL_DOUT
FL_CLK
SSEQ_LED
DECK2
KEY3
KEY2
KEY1
PHOTO_2
PHOTO_1
RMT
VREF+
SW5V
SYNC
PCONT
SYS6V
C2753 0.1
C2999 0.1
C2751 0.1
HP_R
HP_L
R2270 1
R2170 1
R2266 33
R2268 33
R2267 33
R2269 33
R2271 3.3K
R2171 3.3K
R2168 33
R2166 33
R2169 33
R2167 33
C2266 1000P
C2166 1000P
C2151 16V10
R2152 0
C2251 16V10
CONN
C2242 1
R2241 2.7K
C2241 1
OUT2
Q2571
R2243 100K
R2242 22K
R2142 22K
R2143 100K
Q2571 B1GFGCAA0001 MUTING SWITCH
OUT1
R2141 2.7K
C2141 1
C2142 1
CONN1
-9V
R2502 56K
C2501 50V2.2
R2503 150K
R2501 2.2K
Q2501
MUTE_A
R2402 15K
CONN
C2520 0.01
C2401 10P
R2403 270K
C2402 47P
R2532 0
Q2501 B1GDCFJJ0023 MUTING CONTROL
IC2804
IC2804 C0AABA000009 DUAL OP-AMP
C2301 10P
R2303 270K
C2302 47P
R2531 0
C2521 0.01
R2302 15K
CONN1
+9.0V
-9.0V
CD7.5V
BLKCK
Q2906
Q2906,Q2907 B1ABCE000016 SWITCH
R2919 4.7K
CDSTAT
Q2907
R2920 4.7K
R2921 4.7K
R2925 4.7K
SW5V
MCLK
MDATA
MLD
CD_RST
R2927 4.7K
C2906 1000P
R2931 10K
R2930 10K
R2929 10K
R2928 10K
R2922 10K
RESTSW
10K
10K
4.7K
4.7K
4.7K
R2924
R2918
R2916
R2914
R2912
C2907 470P
16V100
C2905
0 0 0 0 0 0
R2926
R2923
R2917
R2915
R2913
R2911
RCH
LCH
C2203 1000P
C2103 1000P
C2102 0.1
C2202 0.1
R2102 1.8K
R2202 1.8K
R2201 1.2K
R2101 1.2K
C2201 1
C2101 1
C2901 0.1
C2902 16V10
CD8V
SW5V
R2907 1K
R2908 330
R2932 0
D2901 B0ADCC000002
C2904 16V10
R2909 2.2K
Q2902
R2910 330
R2901 10K
C2903 0.01
R2933 0
D2904 B0EAKM000117
R2903 15
R2902 12
Q2901
Q2901 B1ACKD000005 SWITCH
Q2902 B1AACF000064 SWITCH
/RESTSW
/RST
STAT
BLKCLK
MLD
MDATA
MCLK
PGND
+7.5V
LD_SW
CD_GND
CD3.3V
RCH_OUT
AGND
LCH_OUT
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
CN2801
TO A CD SERVO CIRCUIT (CN7002) ON SCHEMATIC DIAGRAM-2

SCHEMATIC DIAGRAM - 6

B MAIN CIRCUIT

—— : +B SIGNAL LINE

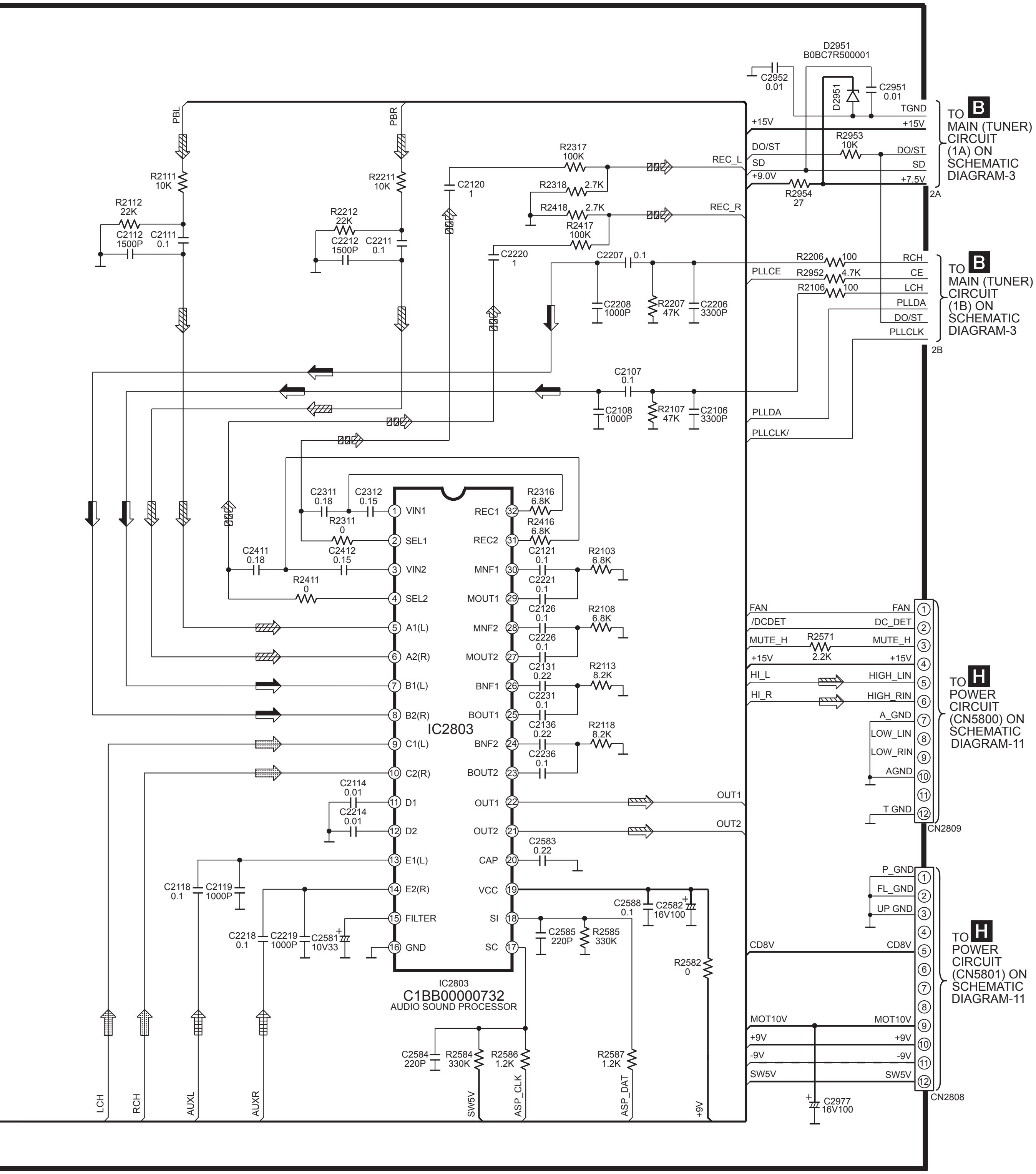


MDATA
MLD
CDSTAT
CD_RST
SSEQ_LED
FL_CLK
FL_DOUT
FL_CS
FL_RST
EXP_DAT
EXP_CLK
V_JOG_B
V_JOG_A
VCC
DECK1_H
/REC
/MTR
/PLG2
/PLG1
SW_LED
/MODE_1
/HALF_1
R2846 4.7K
R2845 10K
R2844 10K
R2843 1K
R2842 10K
R2841 10K
VREF+
R2831 10K
80 MDATA
79 MLD
78 STATUS
77 CD_RST
76 SSEQ_LED
75 NC
74 FL_CLK
73 FL_DOUT
72 FL_CS
71 FL_RESET
70 EX1_DAT
69 EX1_CLK
68 V_JOG_B
67 V_JOG_A
66 NC
65 NC
64 VSS
63 NC
62 VCC
61 NC
60 DECK1_H
59 REC
58 MTR
57 PLG2
56 PLG1
55 NC
54 SW_LED
53 MODE_1
52 HALF_1
51 NC
MCLK
RESTSW
CHG_HLF
CHG_CW
CHG_CCW
CHG_SW1
CHG_SW2
CHG_PLR
CHG_AD2
CHG_AD1
DECK2
KEY3
KEY2
KEY1
PHOTO_2
PHOTO_1
VREF+
VCC
R2856 100
R2857 100
R2858 100
R2859 100
R2860 100
R2861 100
R2862 100
81 MCLK
82 /RESTSW
83 CHG_HLF
84 CHG_CW
85 CHG_CCW
86 CHG_SW1
87 CHG_SW2
88 CHG_PLR
89 CHG_AD2
90 CHG_AD1
91 DECK2
92 KEY3
93 KEY2
94 KEY1
95 PHOTO_2
96 AVSS
97 PHOTO_1
98 VREF
99 AVCC
100 DEMO
C2817 100P
C2816 100P
C2815 100P
C2814 100P
C2813 100P
C2812 100P
C2811 100P
R2867 100K
IC2801
C2CBJG000565
MICROPROCESSOR
NC 50
NC 49
NC 48
DCDET 47
PCONT/EFP_/CE 46
NC 45
NC 44
EE_DAT 43
EE_CLK 42
EE_CS/EFP_/EPM 41
MUTE_A 40
MUTE_H 39
REG1 38
REG2 37
REG3 36
REG4 35
REG5 34
REG6 33
REG7 32
REG8 31
R2834 1K
/DCDET
PCONT
EE_DAT
EE_CLK
EE_CS
MUTE_A
MUTE_H
BUSY
CLK
RXD
TXD
R2817 100K
R2818 100K
R2819 100K
R2820 100K
R2821 100K
R2822 100K
R2823 100K
R2824 100K
1 LM_L
2 NC
3 PLLCE
4 NC
5 NC
6 NC
7 NC
8 BYTE
9 CNVSS/EFP_CNVSS
10 XC_IN
11 XC_OUT
12 /RESET/EFP_RESET
13 X_OUT
14 VSS
15 X_IN
16 VCC
17 /NMI
18 RMT
19 BLKCK
20 SYNC
21 ST/DO
22 SD
23 HARMONIC_SW
24 SW_LV1
25 SW_LV2
26 ASP_DAT
27 ASP_CLK
28 NC
29 PLLDA
30 PLLCK
R2801 10K
R2802 100
R2803 10K
C2821 100P
C2820 100P
C2819 100P
C2818 100P
R2804 47K
R2805 47K
R2807 10K
R2806 10K
SW5V
LM_L
PLLCE
CNVSS
/RESET
VCC
RMT
BLKCK
SYNC
DO/ST
SD
HARMONIC_SW
SW_LV1
SW_LV2
ASP_DAT
ASP_CLK
PLLDA
PLLCK
EE_CLK
EE_CS
VREF+
EE_DAT
XC_IN
XC_OUT
X_OUT
XIN
C2831 0.022
C2832 330P
R2876 22K
R2877 22K
IC2802
C3EBDG000052
E-EPROM IC
(NOT SUPPLIED)
R2878 4.7K
C2833 330P
C2851 0.1
R2891 47K
R2810 22K
D2802
B0ADCJ000020
SYS6V
C2852 16V100
C2853 0.1
R2892 0
R2811 0
C2854 16V100
R2881 220
R2886 1M
R2883 330K
R2882 10M
X2801
H0A327200073
C2840 18P
C2841 18P
IN
OUT
GND
X2802
H2B100500004
Q2806
C2856 1
C2857 50V2.2
D2804
B0ACCK000005
VREF+
Q2806
B1GBCFJJ0051
POWER RESET
CONTROL SWITCH

SCHEMATIC DIAGRAM - 7

B MAIN CIRCUIT

- —— : +B SIGNAL LINE
- – – : -B SIGNAL LINE
- ⇨ : AUX SIGNAL LINE
- ⇨ : CD SIGNAL LINE
- ➡ : FM/AM SIGNAL LINE
- ⇨ : MAIN SIGNAL LINE
- ⇨ : PLAYBACK SIGNAL LINE
- ⇨ : RECORD SIGNAL LINE

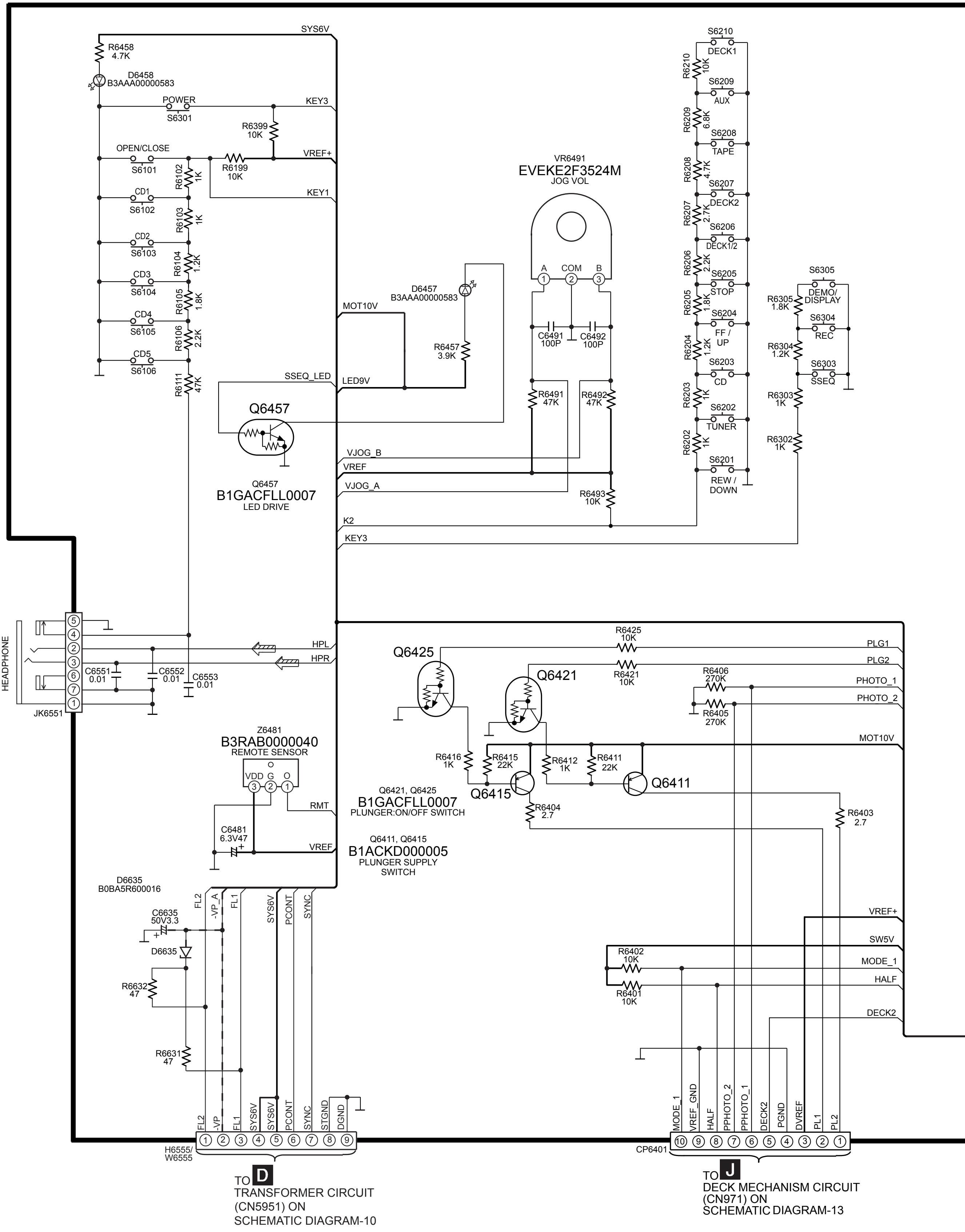


D2951
B0BC7R500001
C2952
0.01
C2951
0.01
D2951
TGND
+15V
+15V
R2953
10K
DO/ST
DO/ST
SD
SD
+9.0V
+7.5V
R2954
27
2A
TO B MAIN (TUNER) CIRCUIT (1A) ON SCHEMATIC DIAGRAM-3
PBL
PBR
R2111
10K
R2211
10K
R2112
22K
C2112
1500P
C2111
0.1
R2212
22K
C2212
1500P
C2211
0.1
C2120
1
R2317
100K
REC_L
R2318
2.7K
R2418
2.7K
R2417
100K
REC_R
C2220
1
C2207
0.1
C2208
1000P
R2207
47K
C2206
3300P
R2206
100
RCH
PLLCE
R2952
4.7K
CE
R2106
100
LCH
PLLDA
DO/ST
PLLCLK
2B
TO B MAIN (TUNER) CIRCUIT (1B) ON SCHEMATIC DIAGRAM-3
C2107
0.1
C2108
1000P
R2107
47K
C2106
3300P
PLLDA
PLLCLK/
C2311
0.18
C2312
0.15
R2311
0
C2411
0.18
C2412
0.15
R2411
0
R2316
6.8K
R2416
6.8K
C2121
0.1
R2103
6.8K
C2221
0.1
C2126
0.1
R2108
6.8K
C2226
0.1
C2131
0.22
R2113
8.2K
C2231
0.1
C2136
0.22
R2118
8.2K
C2236
0.1
1 VIN1
2 SEL1
3 VIN2
4 SEL2
5 A1(L)
6 A2(R)
7 B1(L)
8 B2(R)
9 C1(L)
10 C2(R)
11 D1
12 D2
13 E1(L)
14 E2(R)
15 FILTER
16 GND
32 REC1
31 REC2
30 MNF1
29 MOUT1
28 MNF2
27 MOUT2
26 BNF1
25 BOUT1
24 BNF2
23 BOUT2
22 OUT1
21 OUT2
20 CAP
19 VCC
18 SI
17 SC
IC2803
C2114
0.01
C2214
0.01
C2118
0.1
C2119
1000P
C2218
0.1
C2219
1000P
C2581
10V33
C2583
0.22
OUT1
OUT2
C2588
0.1
C2582
16V100
C2585
220P
R2585
330K
R2582
0
IC2803
C1BB00000732
AUDIO SOUND PROCESSOR
C2584
220P
R2584
330K
R2586
1.2K
R2587
1.2K
LCH
RCH
AUXL
AUXR
SW5V
ASP_CLK
ASP_DAT
+9V
FAN
FAN
/DCDET
DC_DET
MUTE_H
R2571
2.2K
MUTE_H
+15V
+15V
HI_L
HIGH_LIN
HI_R
HIGH_RIN
A_GND
LOW_LIN
LOW_RIN
AGND
T GND
CN2809
TO H POWER CIRCUIT (CN5800) ON SCHEMATIC DIAGRAM-11
P_GND
FL_GND
UP GND
CD8V
CD8V
MOT10V
MOT10V
+9V
+9V
-9V
-9V
SW5V
SW5V
C2977
16V100
CN2808
TO H POWER CIRCUIT (CN5801) ON SCHEMATIC DIAGRAM-11

SCHEMATIC DIAGRAM - 8

C PANEL CIRCUIT

—— : +B SIGNAL LINE
– – : -B SIGNAL LINE
⇨ : MAIN SIGNAL LINE



SYS6V
R6458
4.7K
D6458
B3AAA00000583
POWER
S6301
KEY3
R6399
10K
OPEN/CLOSE
S6101
R6199
10K
VREF+
R6102
1K
KEY1
CD1
S6102
R6103
1K
CD2
S6103
R6104
1.2K
CD3
S6104
R6105
1.8K
CD4
S6105
R6106
2.2K
CD5
S6106
R6111
47K
MOT10V
D6457
B3AAA00000583
R6457
3.9K
SSEQ_LED
LED9V
Q6457
VJOG_B
VREF
VJOG_A
K2
KEY3
Q6457
B1GACFLL0007
LED DRIVE
VR6491
EVEKE2F3524M
JOG VOL
A
COM
B
C6491
100P
C6492
100P
R6491
47K
R6492
47K
R6493
10K
S6210
DECK1
R6210
10K
S6209
AUX
R6209
6.8K
S6208
TAPE
R6208
4.7K
S6207
DECK2
R6207
2.7K
S6206
DECK1/2
R6206
2.2K
S6205
STOP
R6205
1.8K
S6204
FF / UP
R6204
1.2K
S6203
CD
R6203
1K
S6202
TUNER
R6202
1K
S6201
REW / DOWN
S6305
DEMO/ DISPLAY
R6305
1.8K
S6304
REC
R6304
1.2K
S6303
SSEQ
R6303
1K
R6302
1K
HEADPHONE
JK6551
C6551
0.01
C6552
0.01
C6553
0.01
HPL
HPR
R6425
10K
PLG1
Q6425
PLG2
R6421
10K
Q6421
R6406
270K
PHOTO_1
PHOTO_2
R6405
270K
MOT10V
R6416
1K
R6415
22K
R6412
1K
R6411
22K
Q6415
Q6411
R6404
2.7
R6403
2.7
Z6481
B3RAB0000040
REMOTE SENSOR
VDD G O
RMT
C6481
6.3V47
VREF
Q6421, Q6425
B1GACFLL0007
PLUNGER:ON/OFF SWITCH
Q6411, Q6415
B1ACKD000005
PLUNGER SUPPLY SWITCH
D6635
B0BA5R600016
C6635
50V3.3
D6635
R6632
47
R6631
47
FL2
-VP_A
FL1
SYS6V
PCONT
SYNC
VREF+
SW5V
MODE_1
HALF
DECK2
R6402
10K
R6401
10K
FL2
-VP
FL1
SYS6V
SYS6V
PCONT
SYNC
STGND
DGND
H6555/ W6555
MODE_1
VREF_GND
HALF
PPHOTO_2
PPHOTO_1
DECK2
PGND
DVREF
PL1
PL2
CP6401

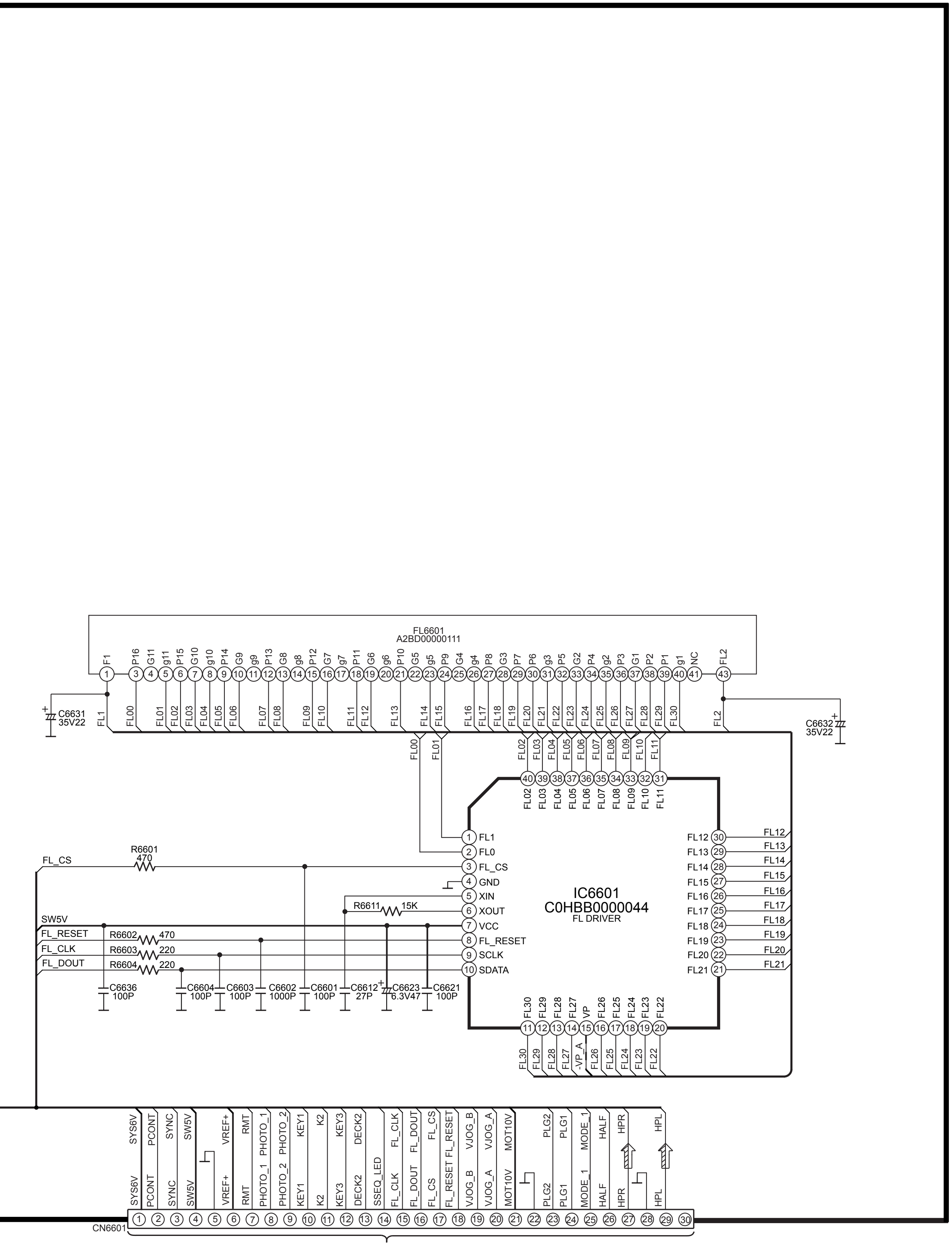
TO D
TRANSFORMER CIRCUIT
(CN5951) ON
SCHEMATIC DIAGRAM-10

TO J
DECK MECHANISM CIRCUIT
(CN971) ON
SCHEMATIC DIAGRAM-13

SCHEMATIC DIAGRAM - 9

C PANEL CIRCUIT

—— : +B SIGNAL LINE   – – : -B SIGNAL LINE   ⇨ : MAIN SIGNAL LINE

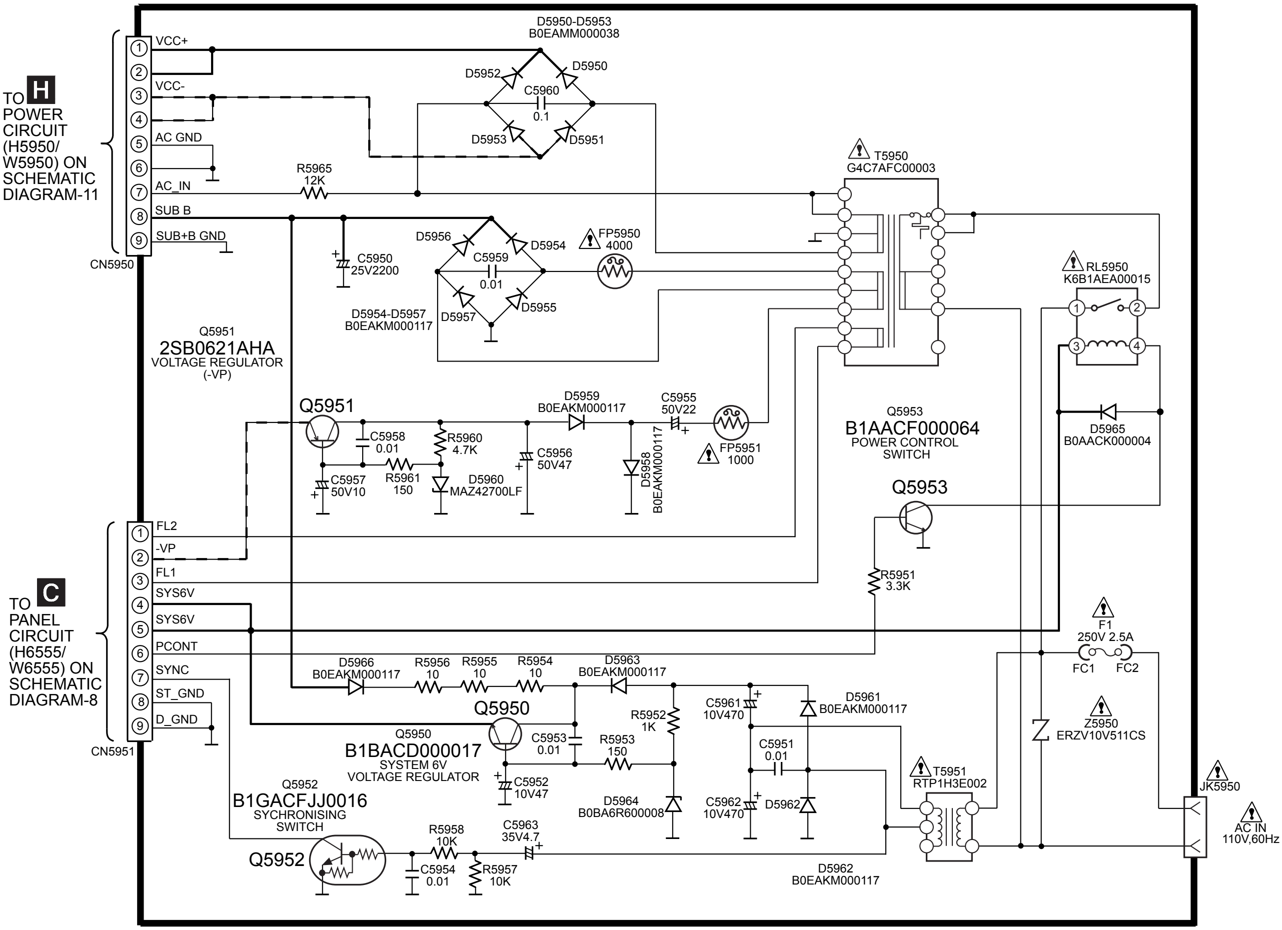

FL6601
A2BD00000111
F1 P16 G11 g11 P15 G10 g10 P14 G9 g9 P13 G8 g8 P12 G7 g7 P11 G6 g6 P10 G5 g5 P9 G4 g4 P8 G3 P7 P6 g3 P5 G2 P4 g2 P3 G1 P2 P1 g1 NC FL2
C6631 35V22
C6632 35V22
FL1 FL00 FL01 FL02 FL03 FL04 FL05 FL06 FL07 FL08 FL09 FL10 FL11 FL12 FL13 FL14 FL15 FL16 FL17 FL18 FL19 FL20 FL21 FL22 FL23 FL24 FL25 FL26 FL27 FL28 FL29 FL30 FL2
IC6601
C0HBB0000044
FL DRIVER
1 FL1
2 FL0
3 FL_CS
4 GND
5 XIN
6 XOUT
7 VCC
8 FL_RESET
9 SCLK
10 SDATA
FL12 30
FL13 29
FL14 28
FL15 27
FL16 26
FL17 25
FL18 24
FL19 23
FL20 22
FL21 21
FL30 FL29 FL28 FL27 VP FL26 FL25 FL24 FL23 FL22
-VP_A
FL_CS
R6601 470
R6611 15K
SW5V
FL_RESET
R6602 470
FL_CLK
R6603 220
FL_DOUT
R6604 220
C6636 100P
C6604 100P
C6603 100P
C6602 1000P
C6601 100P
C6612 27P
C6623 6.3V47
C6621 100P
SYS6V PCONT SYNC SW5V VREF+ RMT PHOTO_1 PHOTO_2 KEY1 K2 KEY3 DECK2 SSEQ_LED FL_CLK FL_DOUT FL_CS FL_RESET VJOG_B VJOG_A MOT10V PLG2 PLG1 MODE_1 HALF HPR HPL
CN6601

TO **B**
MAIN CIRCUIT
(CN2806) ON
SCHEMATIC
DIAGRAM-5

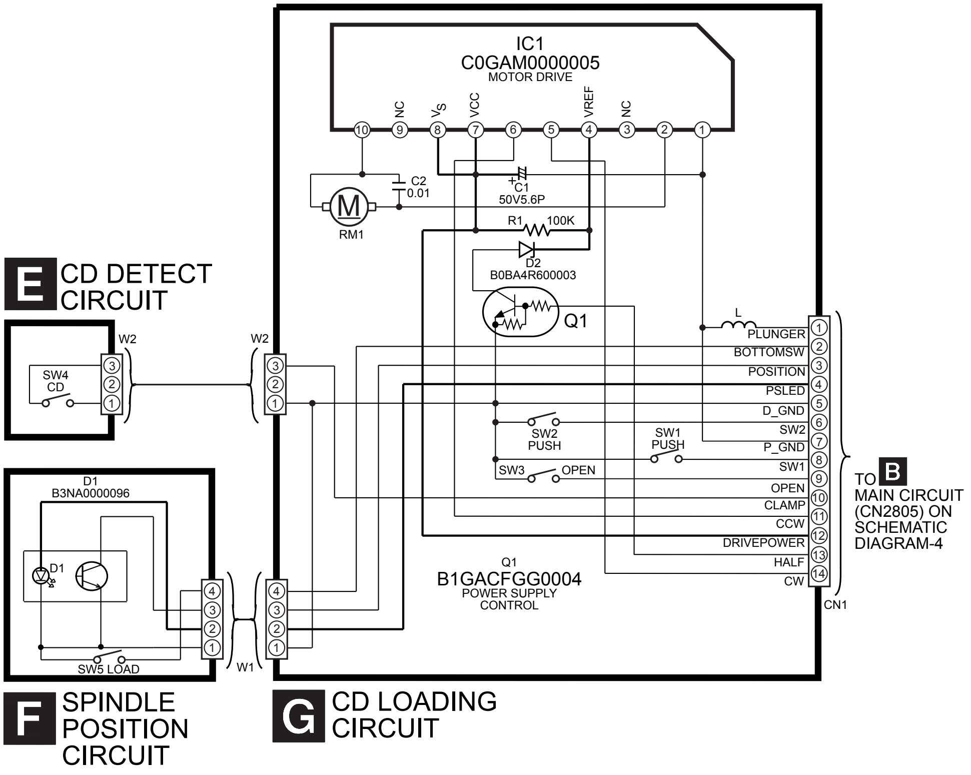
SCHEMATIC DIAGRAM - 10

—— : +B SIGNAL LINE　　– – : -B SIGNAL LINE

D TRANSFORMER CIRCUIT



TO H POWER CIRCUIT (H5950/ W5950) ON SCHEMATIC DIAGRAM-11
CN5950
VCC+
VCC-
AC GND
AC_IN
SUB B
SUB+B GND
D5950-D5953
B0EAMM000038
D5952
D5950
C5960
0.1
D5953
D5951
R5965
12K
C5950
25V2200
D5956
D5954
C5959
0.01
D5957
D5955
D5954-D5957
B0EAKM000117
FP5950
4000
T5950
G4C7AFC00003
RL5950
K6B1AEA00015
D5965
B0AACK000004
Q5951
2SB0621AHA
VOLTAGE REGULATOR
(-VP)
Q5951
C5958
0.01
R5960
4.7K
C5957
50V10
R5961
150
D5960
MAZ42700LF
D5959
B0EAKM000117
C5956
50V47
D5958
B0EAKM000117
C5955
50V22
FP5951
1000
Q5953
B1AACF000064
POWER CONTROL
SWITCH
Q5953
R5951
3.3K
TO C PANEL CIRCUIT (H6555/ W6555) ON SCHEMATIC DIAGRAM-8
CN5951
FL2
-VP
FL1
SYS6V
SYS6V
PCONT
SYNC
ST_GND
D_GND
F1
250V 2.5A
FC1
FC2
Z5950
ERZV10V511CS
D5966
B0EAKM000117
R5956
10
R5955
10
R5954
10
D5963
B0EAKM000117
Q5950
Q5950
B1BACD000017
SYSTEM 6V
VOLTAGE REGULATOR
C5953
0.01
R5953
150
R5952
1K
C5952
10V47
D5964
B0BA6R600008
C5961
10V470
D5961
B0EAKM000117
C5951
0.01
C5962
10V470
D5962
T5951
RTP1H3E002
JK5950
AC IN
110V,60Hz
Q5952
B1GACFJJ0016
SYCHRONISING
SWITCH
Q5952
R5958
10K
C5963
35V4.7
C5954
0.01
R5957
10K
D5962
B0EAKM000117



IC1
C0GAM0000005
MOTOR DRIVE
NC
Vs
VCC
VREF
NC
C2
0.01
C1
50V5.6P
M
RM1
R1
100K
D2
B0BA4R600003
Q1
L
PLUNGER
BOTTOMSW
POSITION
PSLED
D_GND
SW2
P_GND
SW1
OPEN
CLAMP
CCW
DRIVEPOWER
HALF
CW
CN1
TO B MAIN CIRCUIT (CN2805) ON SCHEMATIC DIAGRAM-4
SW2
PUSH
SW1
PUSH
SW3
OPEN
W2
SW4
CD
W2
D1
B3NA0000096
D1
SW5 LOAD
W1
Q1
B1GACFGG0004
POWER SUPPLY
CONTROL

E CD DETECT CIRCUIT

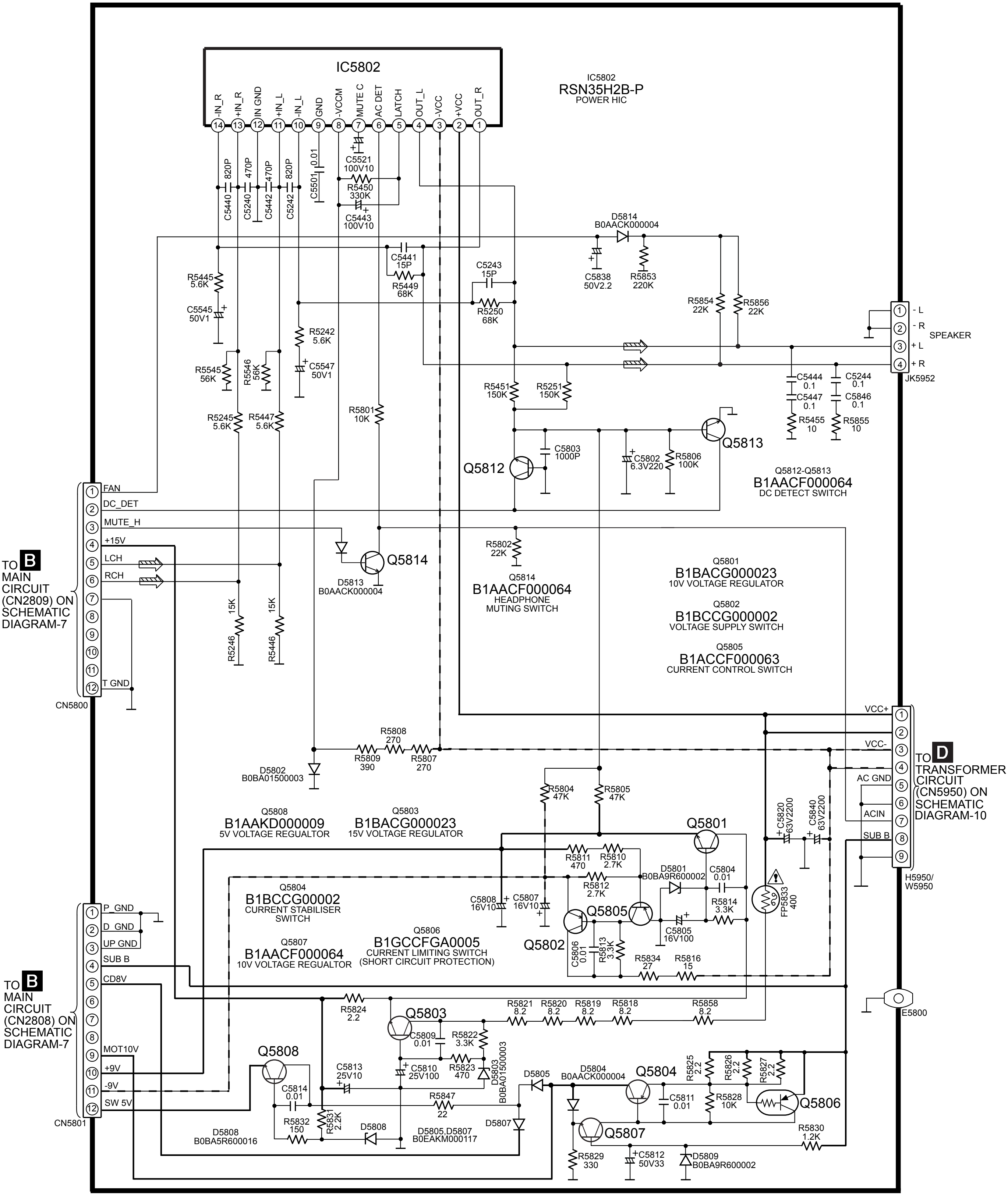
F SPINDLE POSITION CIRCUIT

G CD LOADING CIRCUIT

SCHEMATIC DIAGRAM - 11

—— : +B SIGNAL LINE   – – : -B SIGNAL LINE   ⇨ : MAIN SIGNAL LINE

H POWER CIRCUIT



IC5802
-IN_R 14
+IN_R 13
IN GND 12
+IN_L 11
-IN_L 10
GND 9
-VCCM 8
MUTE C 7
AC DET 6
LATCH 5
OUT_L 4
-VCC 3
+VCC 2
OUT_R 1
IC5802
RSN35H2B-P
POWER HIC
C5440 820P
C5240 470P
C5442 470P
C5242 820P
C5501 0.01
C5521 100V10
R5450 330K
C5443 100V10
D5814 B0AACK000004
C5441 15P
R5449 68K
C5243 15P
R5250 68K
C5838 50V2.2
R5853 220K
R5854 22K
R5856 22K
R5445 5.6K
C5545 50V1
R5242 5.6K
C5547 50V1
R5545 56K
R5546 56K
R5245 5.6K
R5447 5.6K
R5801 10K
R5451 150K
R5251 150K
- L
- R
+ L
+ R
SPEAKER
JK5952
C5444 0.1
C5244 0.1
C5447 0.1
C5846 0.1
R5455 10
R5855 10
C5803 1000P
C5802 6.3V220
R5806 100K
Q5812
Q5813
Q5812-Q5813
B1AACF000064
DC DETECT SWITCH
FAN
DC_DET
MUTE_H
+15V
LCH
RCH
T GND
CN5800
TO B MAIN CIRCUIT (CN2809) ON SCHEMATIC DIAGRAM-7
D5813 B0AACK000004
Q5814
R5802 22K
Q5814
B1AACF000064
HEADPHONE MUTING SWITCH
Q5801
B1BACG000023
10V VOLTAGE REGULATOR
Q5802
B1BCCG000002
VOLTAGE SUPPLY SWITCH
Q5805
B1ACCF000063
CURRENT CONTROL SWITCH
R5246 15K
R5446 15K
VCC+
VCC-
AC GND
ACIN
SUB B
TO D TRANSFORMER CIRCUIT (CN5950) ON SCHEMATIC DIAGRAM-10
H5950/ W5950
R5808 270
R5809 390
R5807 270
D5802 B0BA01500003
R5804 47K
R5805 47K
C5820 63V2200
C5840 63V2200
Q5808
B1AAKD000009
5V VOLTAGE REGUALTOR
Q5803
B1BACG000023
15V VOLTAGE REGULATOR
Q5801
R5811 470
R5810 2.7K
D5801 B0BA9R600002
C5804 0.01
R5812 2.7K
C5808 16V10
C5807 16V10
Q5805
R5814 3.3K
FP5833 400
Q5804
B1BCCG00002
CURRENT STABILISER SWITCH
Q5806
B1GCCFGA0005
CURRENT LIMITING SWITCH (SHORT CIRCUIT PROTECTION)
Q5807
B1AACF000064
10V VOLTAGE REGUALTOR
Q5802
C5806 0.01
R5813 3.3K
C5805 16V100
R5834 27
R5816 15
E5800
P_GND
D_GND
UP GND
SUB B
CD8V
MOT10V
+9V
-9V
SW 5V
CN5801
TO B MAIN CIRCUIT (CN2808) ON SCHEMATIC DIAGRAM-7
R5824 2.2
Q5803
R5821 8.2
R5820 8.2
R5819 8.2
R5818 8.2
R5858 8.2
C5809 0.01
R5822 3.3K
C5810 25V100
R5823 470
D5803 B0BA01500003
Q5808
C5813 25V10
C5814 0.01
R5847 22
R5832 150
R5831 2.2K
D5808
D5808 B0BA5R600016
D5805,D5807 B0EAKM000117
D5807
D5805
D5804 B0AACK000004
Q5804
R5825 2.2
R5826 2.2
R5827 2.2
C5811 0.01
R5828 10K
Q5806
Q5807
R5830 1.2K
R5829 330
C5812 50V33
D5809 B0BA9R600002

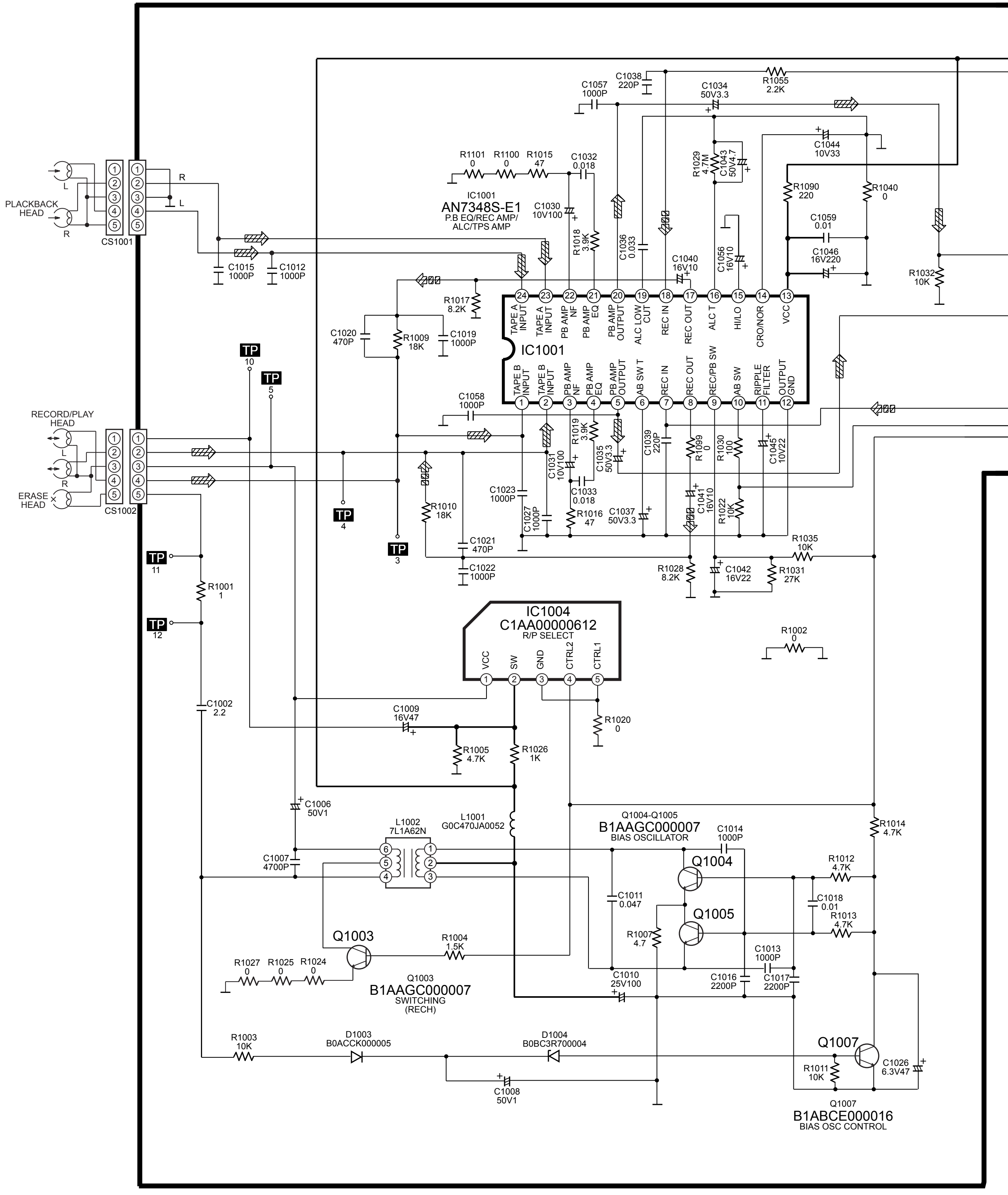
SCHEMATIC DIAGRAM -12

—— : +B SIGNAL LINE

▨⇨ : PLAYBACK SIGNAL LINE

▨⇨ : RECORD SIGNAL LINE

I DECK CIRCUIT



PLACKBACK HEAD
L
R
CS1001
RECORD/PLAY HEAD
ERASE HEAD
CS1002
C1015 1000P
C1012 1000P
IC1001
AN7348S-E1
P.B EQ/REC AMP/ ALC/TPS AMP
R1101 0
R1100 0
R1015 47
C1032 0.018
C1030 10V100
R1018 3.9K
C1057 1000P
C1038 220P
C1034 50V3.3
R1055 2.2K
C1036 0.033
C1040 16V10
R1029 4.7M
C1043 50V4.7
C1056 16V10
C1044 10V33
R1090 220
R1040 0
C1059 0.01
C1046 16V220
R1032 10K
R1017 8.2K
C1020 470P
R1009 18K
C1019 1000P
TAPE A INPUT
TAPE A INPUT
PB AMP NF
PB AMP EQ
PB AMP OUTPUT
ALC LOW CUT
REC IN
REC OUT
ALC T
HI/LO
CRO/NOR
VCC
TAPE B INPUT
TAPE B INPUT
PB AMP NF
PB AMP EQ
PB AMP OUTPUT
AB SW T
REC IN
REC OUT
REC/PB SW
AB SW
RIPPLE FILTER
OUTPUT GND
TP 10
TP 5
TP 4
TP 3
TP 11
TP 12
C1058 1000P
R1019 3.9K
C1031 10V100
C1033 0.018
C1035 50V3.3
C1039 220P
R1099 0
R1030 100
C1045 10V22
C1041 16V10
R1022 10K
C1023 1000P
C1027 1000P
R1016 47
C1037 50V3.3
R1010 18K
C1021 470P
C1022 1000P
R1028 8.2K
C1042 16V22
R1031 27K
R1035 10K
R1001 1
IC1004
C1AA00000612
R/P SELECT
VCC
SW
GND
CTRL2
CTRL1
R1002 0
C1009 16V47
R1005 4.7K
R1026 1K
R1020 0
C1002 2.2
C1006 50V1
L1002 7L1A62N
L1001 G0C470JA0052
C1007 4700P
Q1004-Q1005
B1AAGC000007
BIAS OSCILLATOR
C1014 1000P
Q1004
Q1005
C1011 0.047
R1007 4.7
R1012 4.7K
C1018 0.01
R1013 4.7K
R1014 4.7K
C1013 1000P
C1010 25V100
C1016 2200P
C1017 2200P
Q1003
R1004 1.5K
R1027 0
R1025 0
R1024 0
Q1003
B1AAGC000007
SWITCHING (RECH)
R1003 10K
D1003 B0ACCK000005
D1004 B0BC3R700004
C1008 50V1
Q1007
R1011 10K
C1026 6.3V47
Q1007
B1ABCE000016
BIAS OSC CONTROL

SCHEMATIC DIAGRAM - 13

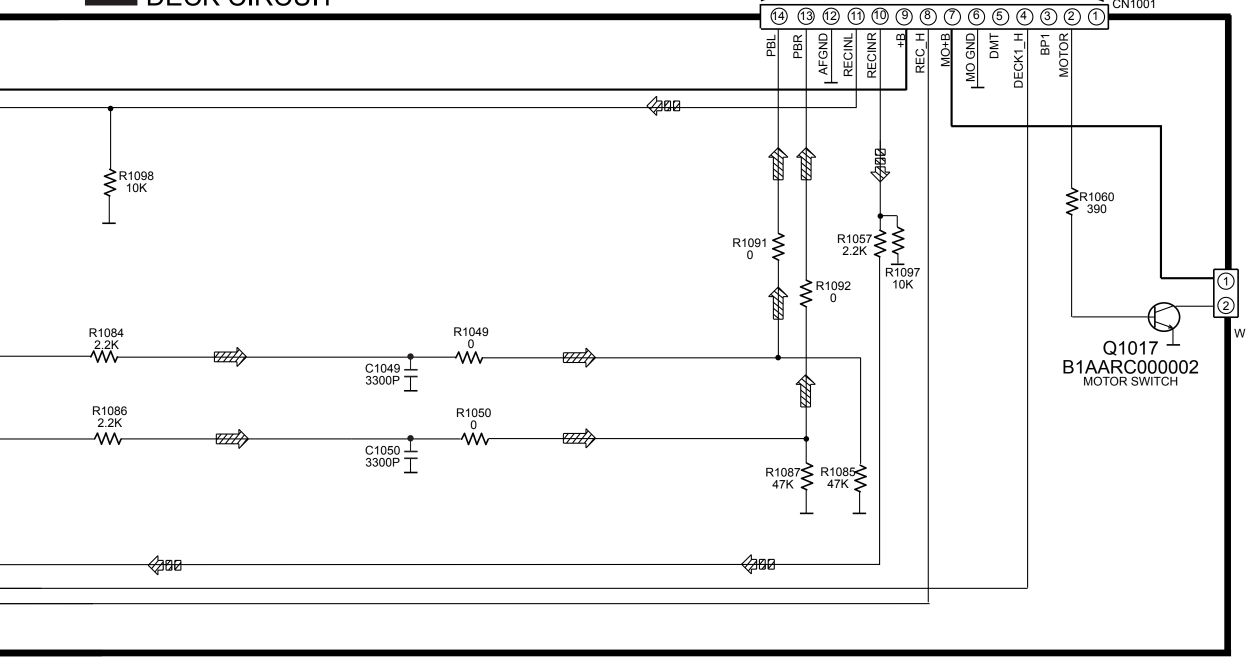
— : +B SIGNAL LINE

▨⇨ : PLAYBACK SIGNAL LINE

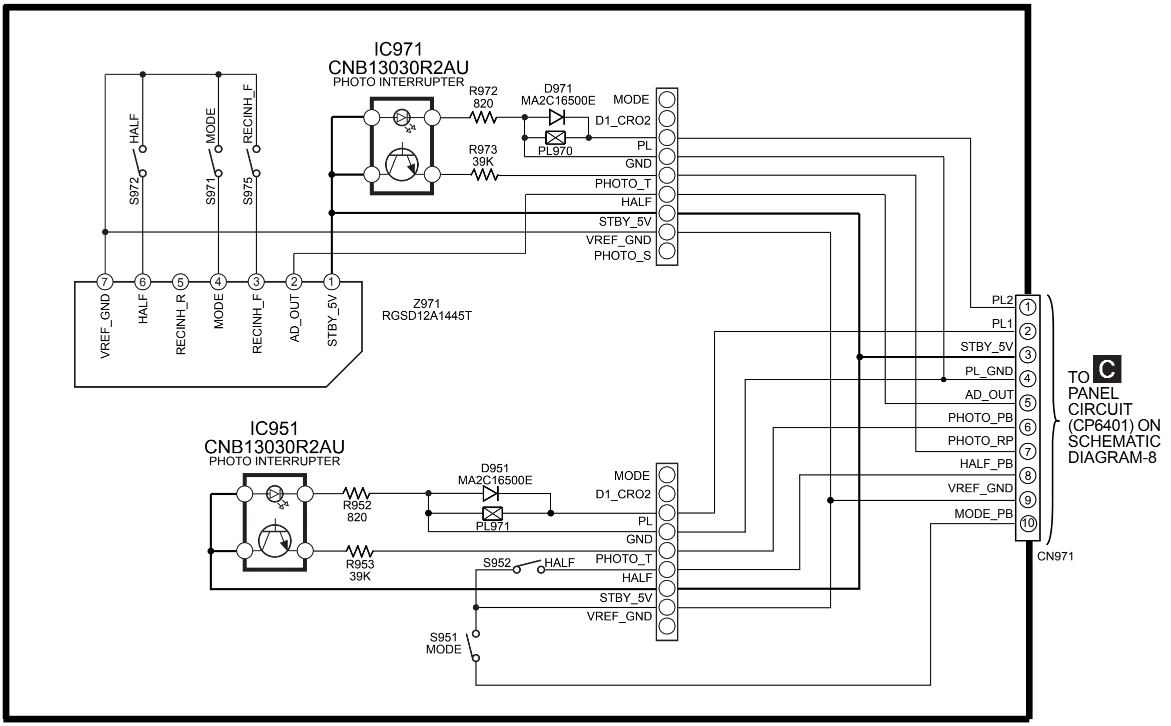
▯▯▯⇨ : RECORD SIGNAL LINE

I DECK CIRCUIT

TO B
MAIN CIRCUIT (CN2803) ON
SCHEMATIC DIAGRAM-4


CN1001
⑭ ⑬ ⑫ ⑪ ⑩ ⑨ ⑧ ⑦ ⑥ ⑤ ④ ③ ② ①
PBL
PBR
AFGND
RECINL
RECINR
+B
REC_H
MO+B
MO GND
DMT
DECK1_H
BP1
MOTOR
R1098
10K
R1091
0
R1092
0
R1057
2.2K
R1097
10K
R1060
390
R1084
2.2K
C1049
3300P
R1049
0
R1086
2.2K
C1050
3300P
R1050
0
R1087
47K
R1085
47K
Q1017
B1AARC000002
MOTOR SWITCH
W1002
+
-
M

J DECK MECHANISM CIRCUIT


IC971
CNB13030R2AU
PHOTO INTERRUPTER
R972
820
R973
39K
D971
MA2C16500E
PL970
MODE
D1_CRO2
PL
GND
PHOTO_T
HALF
STBY_5V
VREF_GND
PHOTO_S
HALF
S972
MODE
S971
RECINH_F
S975
7 VREF_GND
6 HALF
5 RECINH_R
4 MODE
3 RECINH_F
2 AD_OUT
1 STBY_5V
Z971
RGSD12A1445T
IC951
CNB13030R2AU
PHOTO INTERRUPTER
R952
820
R953
39K
D951
MA2C16500E
PL971
S952
HALF
S951
MODE
MODE
D1_CRO2
PL
GND
PHOTO_T
HALF
STBY_5V
VREF_GND
PL2 ①
PL1 ②
STBY_5V ③
PL_GND ④
AD_OUT ⑤
PHOTO_PB ⑥
PHOTO_RP ⑦
HALF_PB ⑧
VREF_GND ⑨
MODE_PB ⑩
CN971
TO C
PANEL
CIRCUIT
(CP6401) ON
SCHEMATIC
DIAGRAM-8

Main P.C.B.

Ref No.	IC2601																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	1.98	5.95	1.99	1.98	0	4.90	5.17	3.82	5.95	0	4.87	3.52	1.604	1.6	1.93	1.99	1.984	2.21	0	0.125
PLAY	1.98	5.95	1.99	1.97	0	4.74	5.15	3.82	5.95	0	4.86	3.52	1.59	1.595	1.93	1.989	1.981	2.20	0	0.125
STOP	1.99	5.96	1.99	1.98	0	4.92	5.17	3.83	5.95	0	4.87	3.52	1.59	1.6	1.93	1.99	1.981	2.20	0	0.125

Ref No.	IC2601																		
MODE	21	22	23	24															
REC	2.357	2.357	5.95	4.57															
PLAY	2.35	2.35	5.95	4.56															
STOP	2.35	2.35	5.95	4.57															

Ref No.	IC2602																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.59	0	0	0	5.18	4.95	0	4.63	0	14.94	0	0	2.59	0	5.19	0	0	14.94	0	2.59
PLAY	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58
STOP	2.57	0	0	0	5.16	4.86	0	4.55	0	15.18	0	0	2.59	5.19	5.19	0	0	15.23	0	2.58

Ref No.	IC2801																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	0	0	0	0	0	0	0	0	0	0.669	0.69	5.25	2.68	0	2.6	0	0	5.25	3.1	5.20
PLAY	0	0	0	0	0	0	0	0	0	0.67	0.68	5.25	2.68	0	2.6	0	0	5.224	3.1	5.20
STOP	0	0	0	0	0	0	0	0	0	0.67	0.67	5.25	2.68	0	2.62	0	0	5.224	3.1	5.20

Ref No.	IC2801																		
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	4.95	0	0	0	0	0	5.28	0	0	0	0	0	0	0	0	0	0	0	0	0
PLAY	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	0	0	0
STOP	4.95	0	0	0	0	0	5.26	0	0	0	0	0	0	0	0	0	0	5.224	0	0

Ref No.	IC2801																		
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0	0	0	0	0	5.18	5.16	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0
PLAY	0	0	0	0	0	5.17	5.15	0	0	0	0	0	4.78	0	0	0	0	0	5.25	0
STOP	0	0	0	0	0	5.18	5.15	0	0	0	0	0	4.79	0	0	0	0	0	5.25	0

Ref No.	IC2801																		
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.3	0	0	0	5.25	3.0	0	0.5
PLAY	0	5.25	0	0	0	0	0	5.25	0	0	0	3.0	0.31	0	0	0	5.25	3.0	0	0.5
STOP	0	5.25	0	0	0	0	0	5.25	0	0	0	3.1	0.3	0	0	0	5.25	3.1	0	0.5

Ref No.	IC2801																		
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
REC	4.91	0	0	5.24	5.25	0	0	0	0	3.65	5.25	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.18
PLAY	4.91	0	0	5.25	5.25	0	0	0	0	3.65	5.22	1.24	5.25	5.23	4.38	0.58	0	5.25	5.26	5.18
STOP	4.92	0	0	5.25	5.25	0	0	0	0	3.65	5.24	1.24	5.25	5.23	4.38	0.59	0	5.25	5.25	5.19

Ref No.	IC2803																		
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	4.52	4.60	4.52	4.60	4.50	4.49	4.49	4.49	4.50	4.50	4.49	4.49	4.49	4.45	4.54	0	5.17	0	9.03	3.38
PLAY	4.52	4.60	4.50	4.61	4.52	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.54	0	5.20	0	9.02	3.38
STOP	0	5.27	0	0	0	0	0	0												

Ref No.	IC2803																		
MODE	21	22	23	24	25	26	27	28	29	30	31	32							
REC	4.54	4.54	4.54	4.52	4.52	4.51	4.54	4.53	4.54	4.53	4.54	4.55							
PLAY	4.54	4.55	4.55	4.53	4.52	4.51	4.54	4.53	4.54	4.54	4.54	4.55							
STOP	4.54	4.55	4.55	4.53	4.52	4.57	4.54	4.53	4.54	4.54	4.54	4.55							

Main P.C.B.

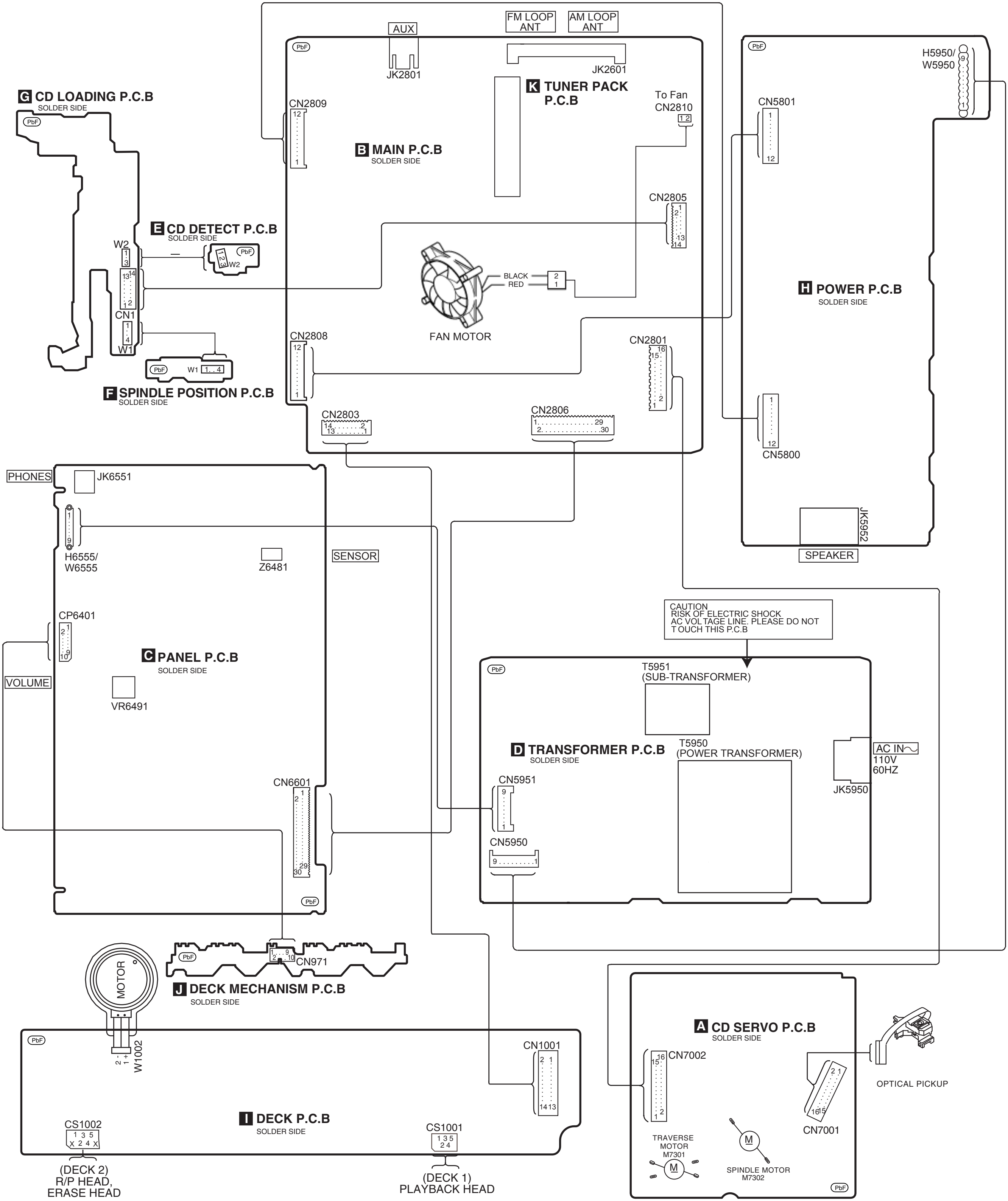
Ref No.	Q2601				Q2606				Q2701				Q2901				Q2902			
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G	
REC	0	0	0		14.79	0	14.79		-8.92	-8.84	-8.18		5.54	3.28	6.5		2.98	5.56	2.4	
PLAY	0	0	0		15.17	0	15.20		-8.92	-8.81	-8.17		5.60	3.29	6.24		3.02	5.58	2.48	
STOP	0	0	0		15.26	0	15.22		-8.96	4.78	-8.95		7.08	3.3	7.65		3.04	7.08	2.5	

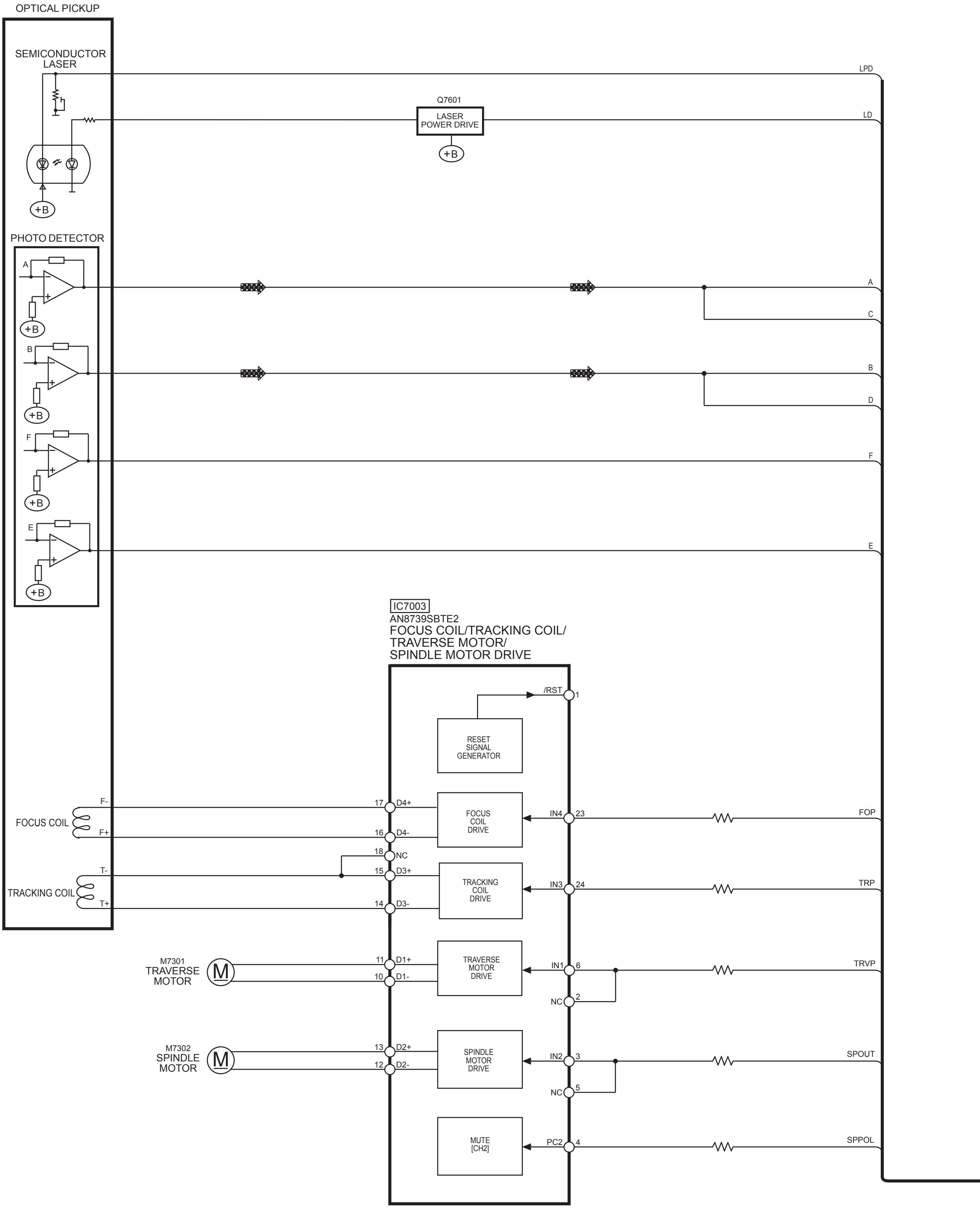
Main P.C.B.

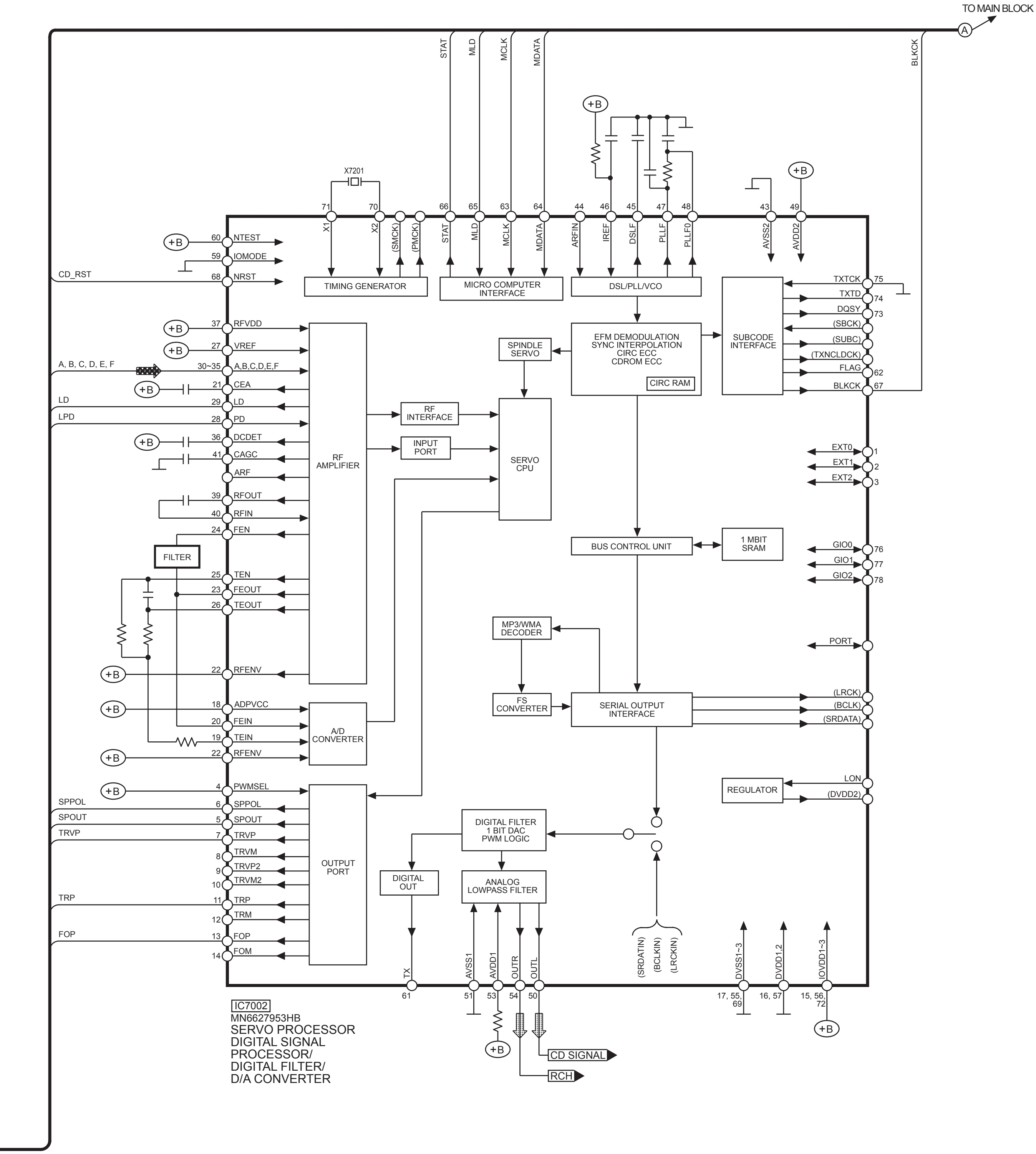
Ref No.	Q2936																			
MODE	E/S	C/D	B/G																	
PLAY	9.92	0	9.94																	
PLAY	9.95	0	9.95																	
STOP	9.99	0	9.99																	

Transformer P.C.B.

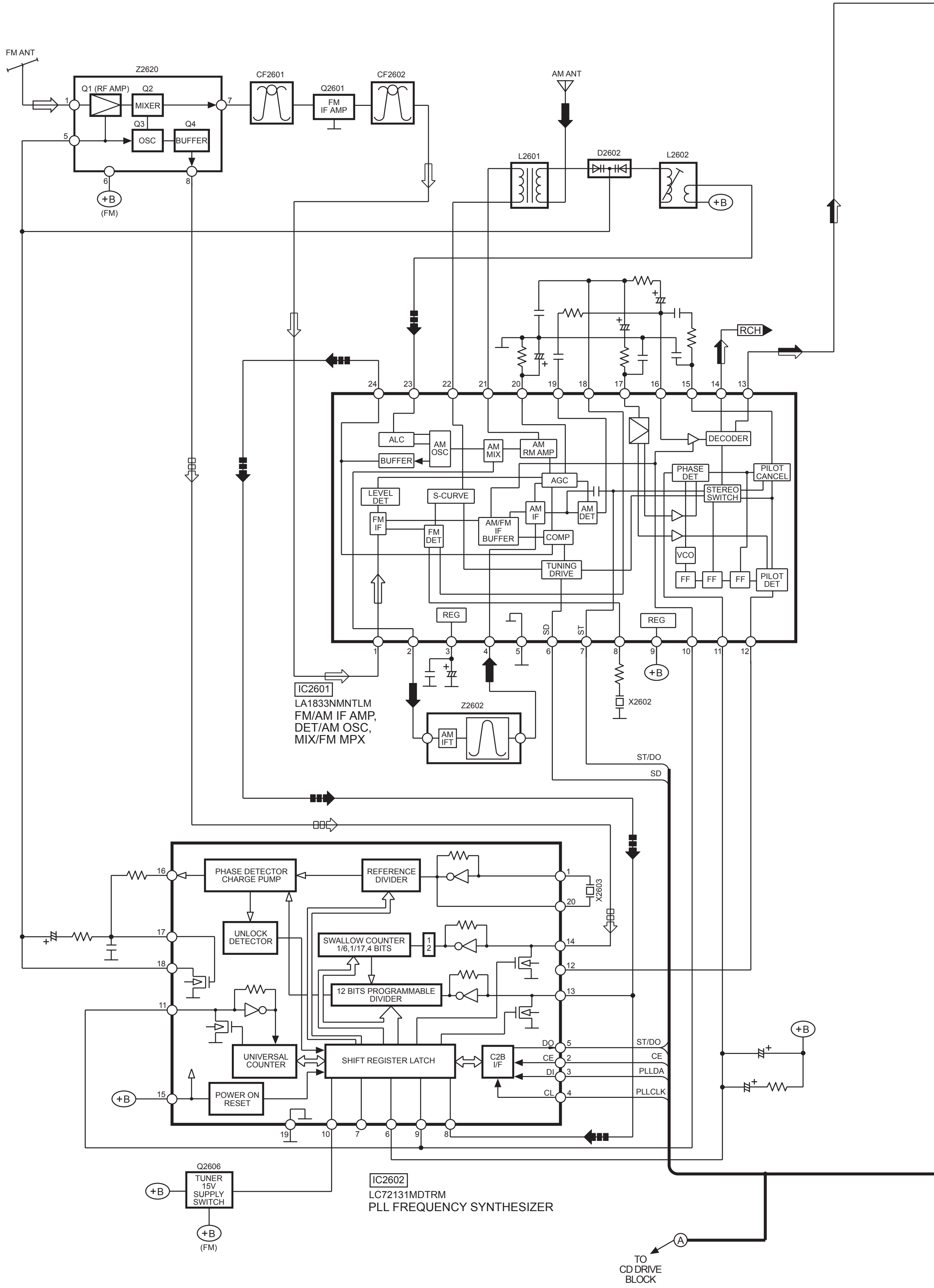
Ref No.	Q5950				Q5951				Q5952				Q5953							
MODE	E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G		E/S	C/D	B/G					
REC	5.98	10.12	6.60		-25.86	-29.20	-26.50		-8.92	-8.84	-8.18		0	0.13	0.8					
PLAY	5.99	10.30	6.59		-25.85	-29.22	-26.50		-8.92	-8.81	-8.17		0	0.13	0.8					
STOP	5.99	10.25	6.59		-25.85	-29.22	-26.50		-8.96	4.78	-8.95		0	0.13	0.8					


AUX
FM LOOP ANT
AM LOOP ANT
PbF
JK2801
JK2601
K TUNER PACK P.C.B
To Fan CN2810
1 2
CN2809
12
1
B MAIN P.C.B
SOLDER SIDE
G CD LOADING P.C.B
SOLDER SIDE
CN2805
1
2
13
14
E CD DETECT P.C.B
SOLDER SIDE
W2
1
3
14
13
2
1
CN1
1
4
W1
BLACK
RED
2
1
FAN MOTOR
CN2808
12
1
W1 1 . . 4
F SPINDLE POSITION P.C.B
SOLDER SIDE
CN2801
16
15
2
1
CN2803
14 2
13 1
CN2806
1 29
2 30
H5950/ W5950
9
1
CN5801
1
12
H POWER P.C.B
SOLDER SIDE
1
12
CN5800
JK5952
SPEAKER
PHONES
JK6551
1
9
H6555/ W6555
Z6481
SENSOR
CP6401
1
2
9
10
C PANEL P.C.B
SOLDER SIDE
VOLUME
VR6491
CN6601
1
2
29
30
CAUTION
RISK OF ELECTRIC SHOCK
AC VOLTAGE LINE. PLEASE DO NOT
TOUCH THIS P.C.B
T5951 (SUB-TRANSFORMER)
D TRANSFORMER P.C.B
SOLDER SIDE
T5950 (POWER TRANSFORMER)
AC IN∼
110V
60HZ
JK5950
CN5951
9
1
CN5950
9 1
MOTOR
1 9
2 10
CN971
J DECK MECHANISM P.C.B
SOLDER SIDE
2 -
1 +
W1002
CN1001
2 1
14 13
I DECK P.C.B
SOLDER SIDE
CS1002
1 3 5
X 2 4 X
(DECK 2) R/P HEAD, ERASE HEAD
CS1001
1 3 5
2 4
(DECK 1) PLAYBACK HEAD
A CD SERVO P.C.B
SOLDER SIDE
CN7002
16
15
2
1
2 1
16 15
CN7001
OPTICAL PICKUP
TRAVERSE MOTOR M7301
M
SPINDLE MOTOR M7302

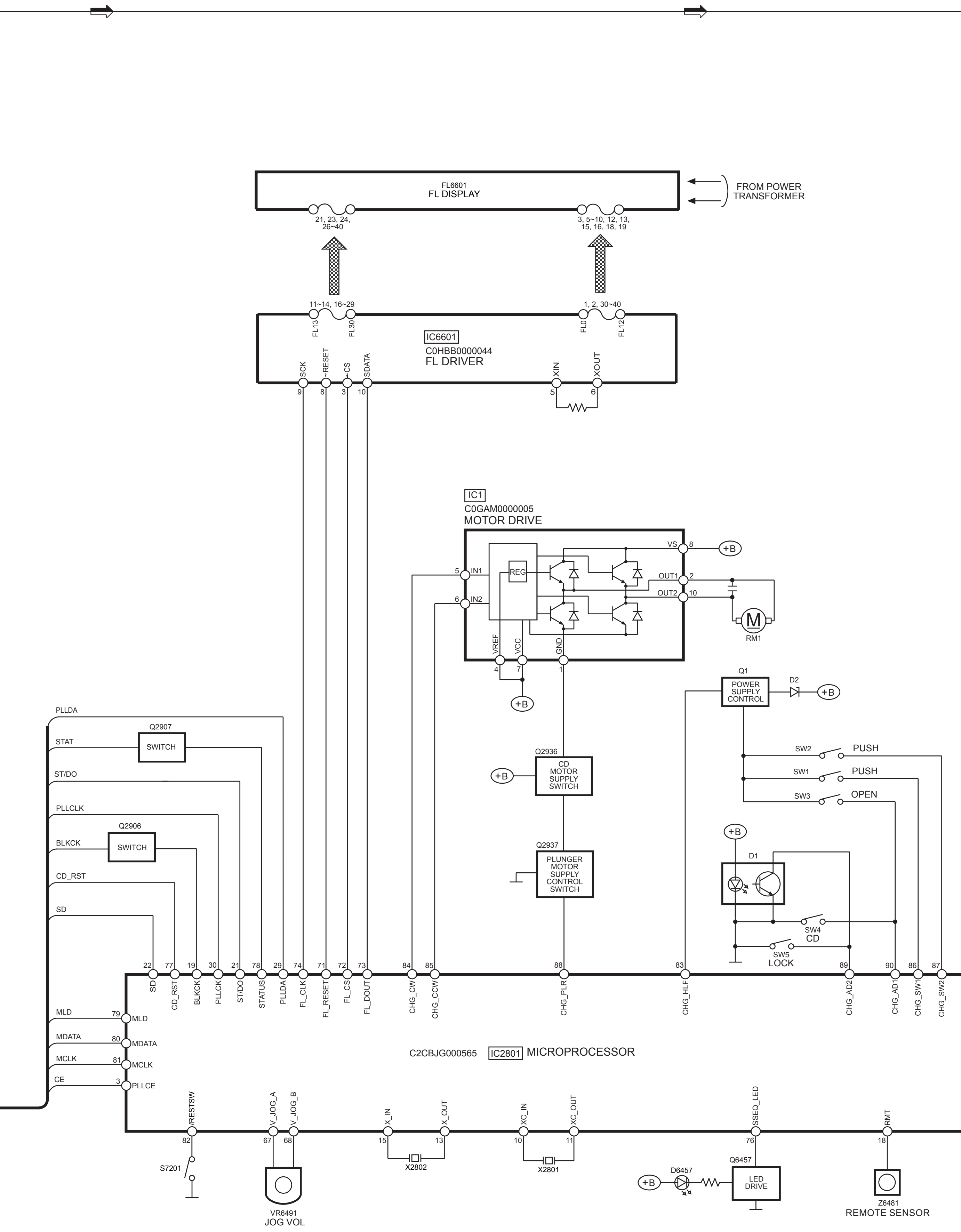

OPTICAL PICKUP
SEMICONDUCTOR LASER
+B
PHOTO DETECTOR
A
+B
B
+B
F
+B
E
+B
FOCUS COIL
F-
F+
TRACKING COIL
T-
T+
Q7601
LASER POWER DRIVE
+B
LPD
LD
A
C
B
D
F
E
IC7003
AN8739SBTE2
FOCUS COIL/TRACKING COIL/
TRAVERSE MOTOR/
SPINDLE MOTOR DRIVE
/RST
1
RESET SIGNAL GENERATOR
17
D4+
16
D4-
FOCUS COIL DRIVE
IN4
23
FOP
18
NC
15
D3+
14
D3-
TRACKING COIL DRIVE
IN3
24
TRP
M7301
TRAVERSE MOTOR
M
11
D1+
10
D1-
TRAVERSE MOTOR DRIVE
IN1
6
NC
2
TRVP
M7302
SPINDLE MOTOR
M
13
D2+
12
D2-
SPINDLE MOTOR DRIVE
IN2
3
NC
5
SPOUT
MUTE [CH2]
PC2
4
SPPOL

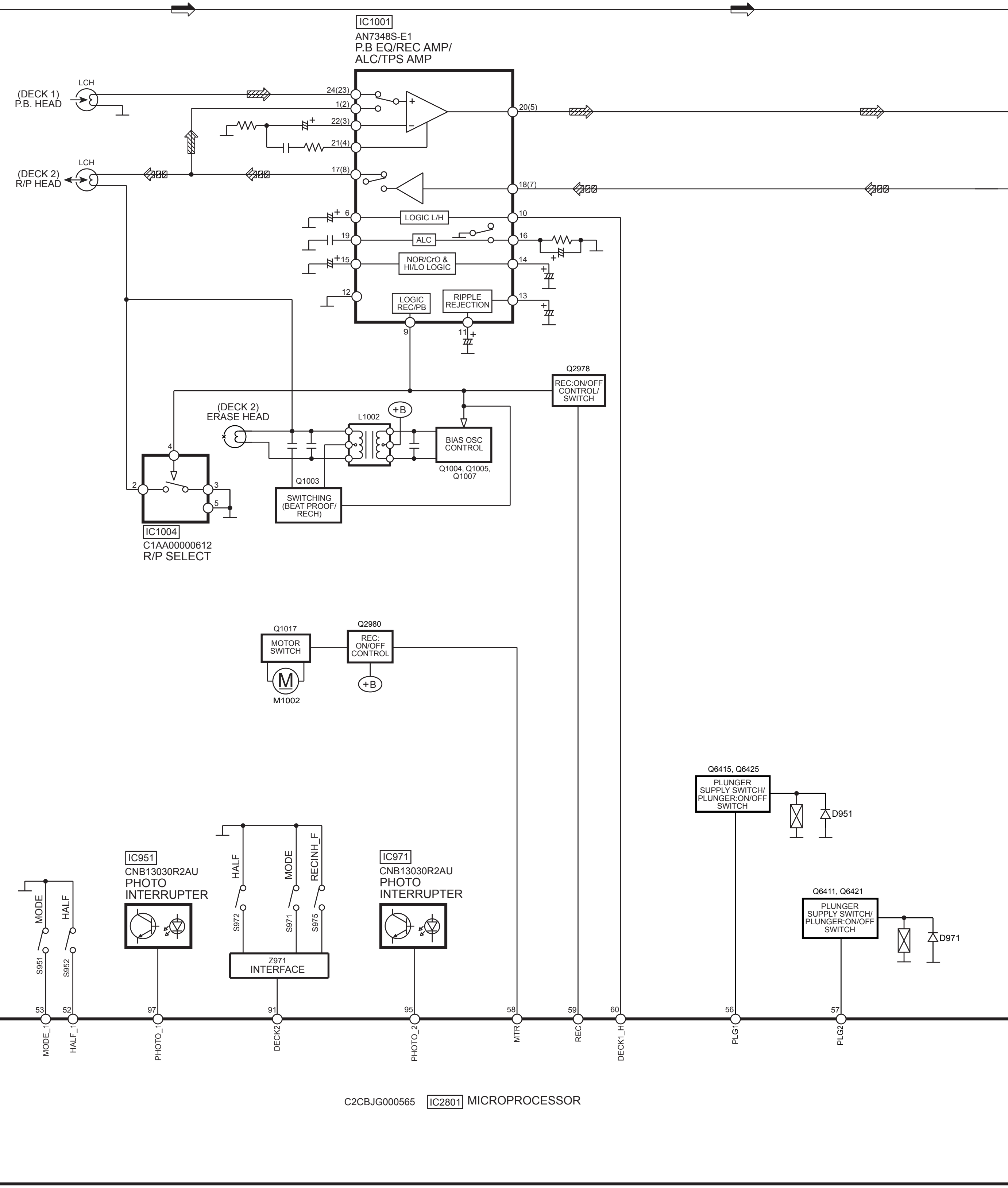

IC7002
MN6627953HB
SERVO PROCESSOR
DIGITAL SIGNAL
PROCESSOR/
DIGITAL FILTER/
D/A CONVERTER

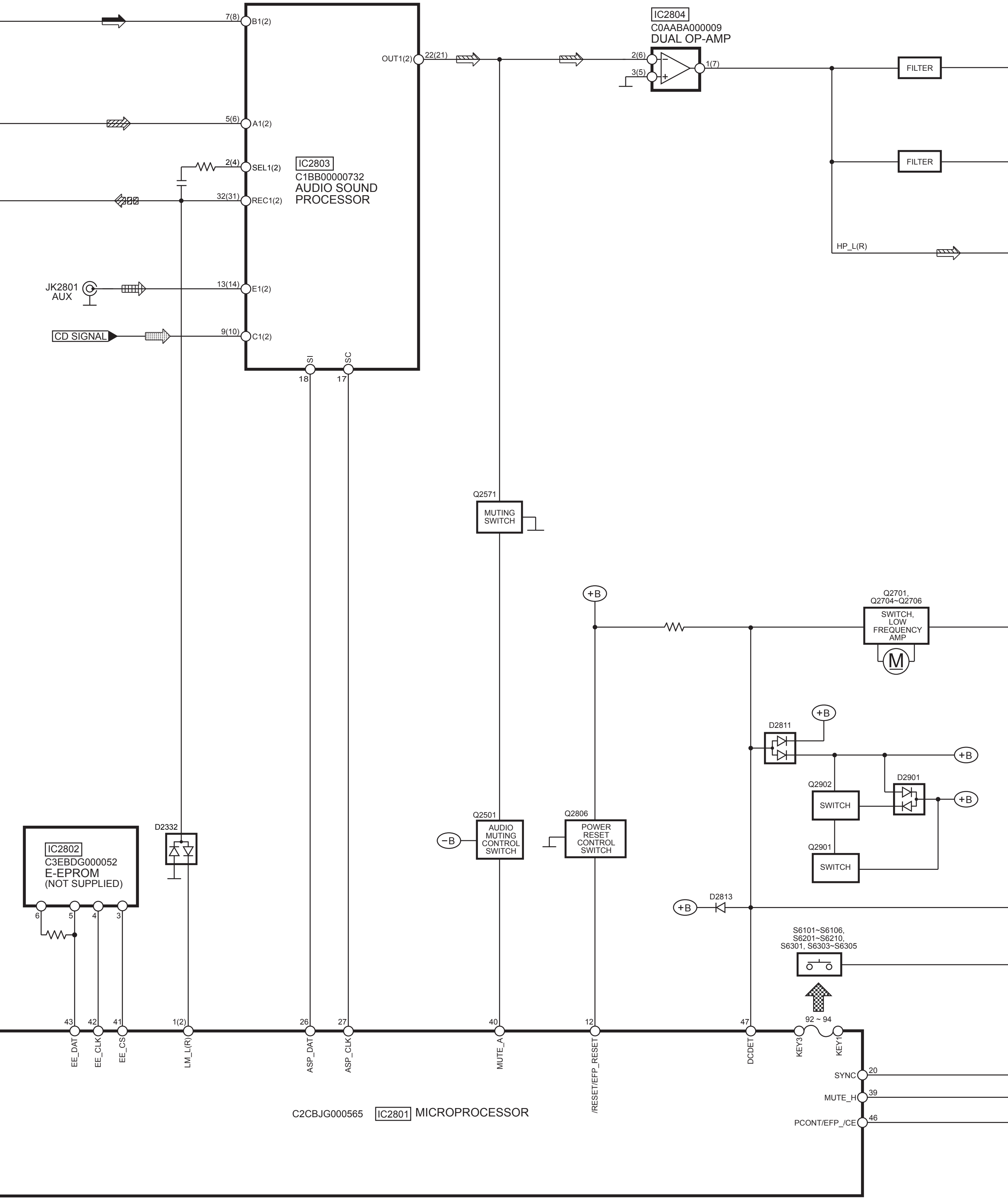
TO MAIN BLOCK
A
STAT
MLD
MCLK
MDATA
BLKCK
X7201
+B
CD_RST
A, B, C, D, E, F
LD
LPD
SPPOL
SPOUT
TRVP
TRP
FOP
60 NTEST
59 IOMODE
68 NRST
37 RFVDD
27 VREF
30~35 A,B,C,D,E,F
21 CEA
29 LD
28 PD
36 DCDET
41 CAGC
ARF
39 RFOUT
40 RFIN
24 FEN
FILTER
25 TEN
23 FEOUT
26 TEOUT
22 RFENV
18 ADPVCC
20 FEIN
19 TEIN
22 RFENV
4 PWMSEL
6 SPPOL
5 SPOUT
7 TRVP
8 TRVM
9 TRVP2
10 TRVM2
11 TRP
12 TRM
13 FOP
14 FOM
71 X1
70 X2
(SMCK)
(PMCK)
66 STAT
65 MLD
63 MCLK
64 MDATA
44 ARFIN
46 IREF
45 DSLF
47 PLLF
48 PLLF0
43 AVSS2
49 AVDD2
TIMING GENERATOR
MICRO COMPUTER INTERFACE
DSL/PLL/VCO
SUBCODE INTERFACE
TXTCK 75
TXTD 74
DQSY 73
(SBCK)
(SUBC)
(TXNCLDCK)
FLAG 62
BLKCK 67
EFM DEMODULATION
SYNC INTERPOLATION
CIRC ECC
CDROM ECC
CIRC RAM
SPINDLE SERVO
RF AMPLIFIER
RF INTERFACE
INPUT PORT
SERVO CPU
EXT0 1
EXT1 2
EXT2 3
BUS CONTROL UNIT
1 MBIT SRAM
GIO0 76
GIO1 77
GIO2 78
MP3/WMA DECODER
PORT
FS CONVERTER
SERIAL OUTPUT INTERFACE
(LRCK)
(BCLK)
(SRDATA)
A/D CONVERTER
REGULATOR
LON
(DVDD2)
OUTPUT PORT
DIGITAL FILTER
1 BIT DAC
PWM LOGIC
DIGITAL OUT
ANALOG LOWPASS FILTER
(SRDATIN)
(BCLKIN)
(LRCKIN)
TX 61
AVSS1 51
AVDD1 53
OUTR 54
OUTL 50
DVSS1~3 17, 55, 69
DVDD1,2 16, 57
IOVDD1~3 15, 56, 72
CD SIGNAL
RCH

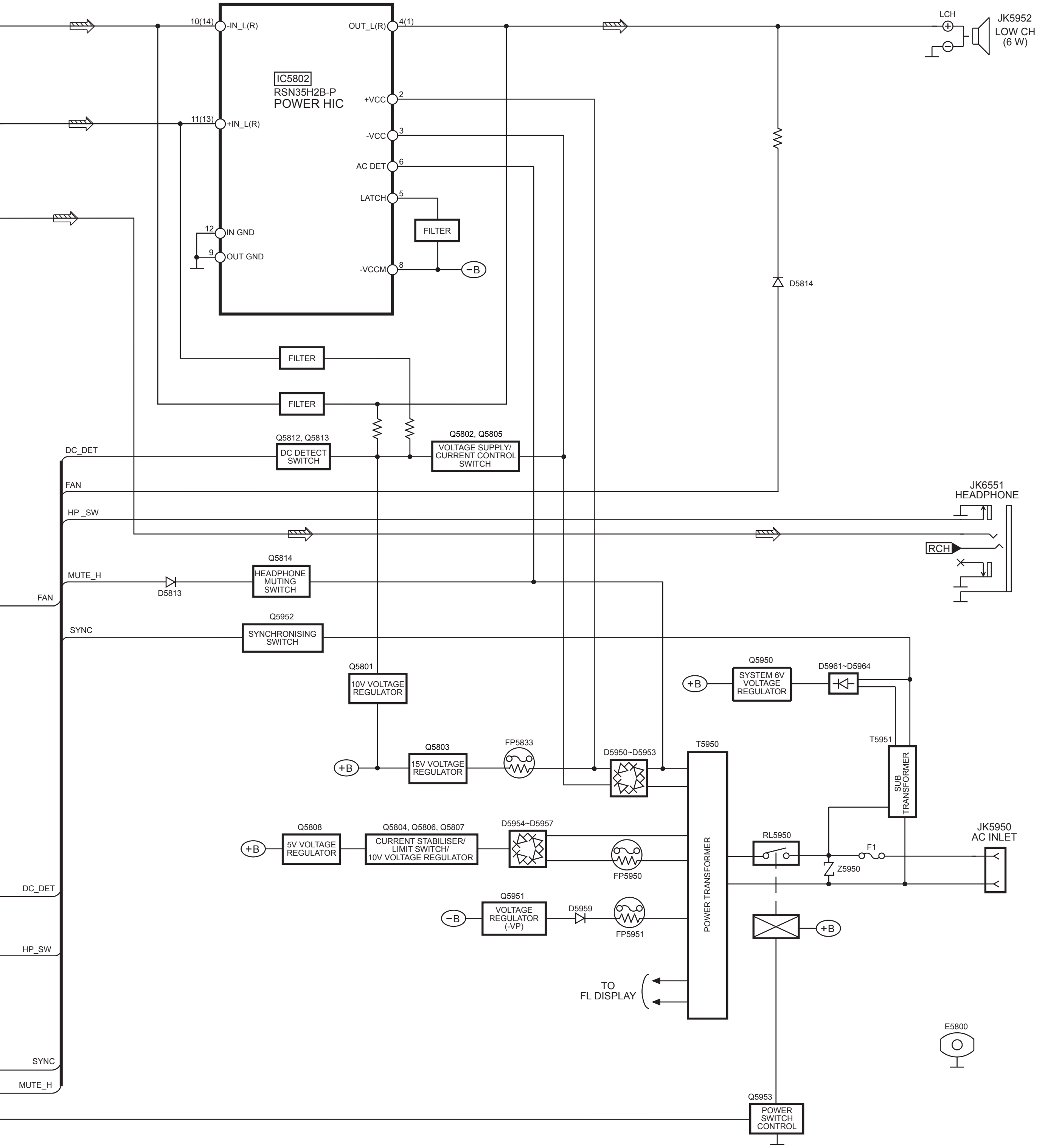


FM ANT
Z2620
Q1 (RF AMP)
Q2
MIXER
Q3
OSC
Q4
BUFFER
+B
(FM)
CF2601
Q2601
FM IF AMP
CF2602
AM ANT
L2601
D2602
L2602
+B
RCH
ALC
AM OSC
BUFFER
AM MIX
AM RM AMP
AGC
LEVEL DET
S-CURVE
FM IF
FM DET
AM/FM IF BUFFER
AM IF
AM DET
COMP
TUNING DRIVE
DECODER
PHASE DET
PILOT CANCEL
STEREO SWITCH
VCO
FF
FF
FF
PILOT DET
REG
REG
SD
ST
+B
X2602
IC2601
LA1833NMNTLM
FM/AM IF AMP,
DET/AM OSC,
MIX/FM MPX
Z2602
AM IFT
ST/DO
SD
PHASE DETECTOR CHARGE PUMP
REFERENCE DIVIDER
X2603
UNLOCK DETECTOR
SWALLOW COUNTER 1/6,1/17,4 BITS
1 2
12 BITS PROGRAMMABLE DIVIDER
UNIVERSAL COUNTER
SHIFT REGISTER LATCH
C2B I/F
POWER ON RESET
+B
DO
CE
DI
CL
ST/DO
CE
PLLDA
PLLCLK
+B
Q2606
TUNER 15V SUPPLY SWITCH
+B
+B
(FM)
IC2602
LC72131MDTRM
PLL FREQUENCY SYNTHESIZER
A
TO CD DRIVE BLOCK


FL6601
FL DISPLAY
FROM POWER TRANSFORMER
21, 23, 24, 26~40
3, 5~10, 12, 13, 15, 16, 18, 19
11~14, 16~29
1, 2, 30~40
FL13
FL30
FL0
FL12
IC6601
C0HBB0000044
FL DRIVER
SCK
~RESET
CS
SDATA
XIN
XOUT
9
8
3
10
5
6
IC1
C0GAM0000005
MOTOR DRIVE
IN1
IN2
REG
VS
OUT1
OUT2
VREF
VCC
GND
5
6
8
2
10
4
7
1
+B
M
RM1
Q1
POWER SUPPLY CONTROL
D2
+B
Q2936
CD MOTOR SUPPLY SWITCH
+B
Q2937
PLUNGER MOTOR SUPPLY CONTROL SWITCH
SW2
PUSH
SW1
PUSH
SW3
OPEN
+B
D1
SW4
CD
SW5
LOCK
PLLDA
STAT
Q2907
SWITCH
ST/DO
PLLCLK
Q2906
SWITCH
BLKCK
CD_RST
SD
22
77
19
30
21
78
29
74
71
72
73
84
85
88
83
89
90
86
87
SD
CD_RST
BLKCK
PLLCK
ST/DO
STATUS
PLLDA
FL_CLK
FL_RESET
FL_CS
FL_DOUT
CHG_CW
CHG_CCW
CHG_PLR
CHG_HLF
CHG_AD2
CHG_AD1
CHG_SW1
CHG_SW2
MLD
79
MLD
MDATA
80
MDATA
MCLK
81
MCLK
CE
3
PLLCE
C2CBJG000565
IC2801
MICROPROCESSOR
/RESTSW
V_JOG_A
V_JOG_B
X_IN
X_OUT
XC_IN
XC_OUT
SSEQ_LED
RMT
82
67
68
15
13
10
11
76
18
S7201
VR6491
JOG VOL
X2802
X2801
+B
D6457
Q6457
LED DRIVE
Z6481
REMOTE SENSOR


IC1001
AN7348S-E1
P.B EQ/REC AMP/
ALC/TPS AMP
LCH
(DECK 1)
P.B. HEAD
LCH
(DECK 2)
R/P HEAD
24(23)
1(2)
22(3)
21(4)
17(8)
20(5)
18(7)
6
19
15
12
10
16
14
13
9
11
LOGIC L/H
ALC
NOR/CrO &
HI/LO LOGIC
LOGIC
REC/PB
RIPPLE
REJECTION
Q2978
REC:ON/OFF
CONTROL/
SWITCH
(DECK 2)
ERASE HEAD
L1002
+B
BIAS OSC
CONTROL
Q1004, Q1005,
Q1007
Q1003
SWITCHING
(BEAT PROOF/
RECH)
4
2
3
5
IC1004
C1AA00000612
R/P SELECT
Q1017
MOTOR
SWITCH
M
M1002
Q2980
REC:
ON/OFF
CONTROL
+B
Q6415, Q6425
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D951
Q6411, Q6421
PLUNGER
SUPPLY SWITCH/
PLUNGER:ON/OFF
SWITCH
D971
MODE
HALF
S951
S952
IC951
CNB13030R2AU
PHOTO
INTERRUPTER
HALF
MODE
RECINH_F
S972
S971
S975
Z971
INTERFACE
IC971
CNB13030R2AU
PHOTO
INTERRUPTER
53
52
97
91
95
58
59
60
56
57
MODE_1
HALF_1
PHOTO_1
DECK2
PHOTO_2
MTR
REC
DECK1_H
PLG1
PLG2
C2CBJG000565
IC2801
MICROPROCESSOR


IC2803
C1BB00000732
AUDIO SOUND
PROCESSOR
7(8)
B1(2)
5(6)
A1(2)
2(4)
SEL1(2)
32(31)
REC1(2)
13(14)
E1(2)
9(10)
C1(2)
OUT1(2)
22(21)
SI
18
SC
17
JK2801
AUX
CD SIGNAL
IC2804
C0AABA000009
DUAL OP-AMP
2(6)
3(5)
1(7)
FILTER
FILTER
HP_L(R)
Q2571
MUTING
SWITCH
+B
Q2701,
Q2704~Q2706
SWITCH,
LOW
FREQUENCY
AMP
M
D2811
+B
+B
Q2902
SWITCH
D2901
+B
Q2901
SWITCH
D2813
+B
S6101~S6106,
S6201~S6210,
S6301, S6303~S6305
92 ~ 94
Q2501
AUDIO
MUTING
CONTROL
SWITCH
–B
Q2806
POWER
RESET
CONTROL
SWITCH
D2332
IC2802
C3EBDG000052
E-EPROM
(NOT SUPPLIED)
6
5
4
3
43
EE_DAT
42
EE_CLK
41
EE_CS
1(2)
LM_L(R)
26
ASP_DAT
27
ASP_CLK
40
MUTE_A
12
/RESET/EFP_RESET
47
DCDET
KEY3
KEY1
SYNC
20
MUTE_H
39
PCONT/EFP_/CE
46
C2CBJG000565
IC2801
MICROPROCESSOR


10(14)
-IN_L(R)
OUT_L(R)
4(1)
IC5802
RSN35H2B-P
POWER HIC
+VCC
2
11(13)
+IN_L(R)
-VCC
3
AC DET
6
LATCH
5
FILTER
12
IN GND
9
OUT GND
-VCCM
8
−B
LCH
JK5952
LOW CH
(6 W)
D5814
FILTER
FILTER
Q5812, Q5813
DC DETECT SWITCH
Q5802, Q5805
VOLTAGE SUPPLY/ CURRENT CONTROL SWITCH
DC_DET
FAN
HP _SW
JK6551
HEADPHONE
RCH
Q5814
MUTE_H
HEADPHONE MUTING SWITCH
D5813
FAN
Q5952
SYNC
SYNCHRONISING SWITCH
Q5801
10V VOLTAGE REGULATOR
Q5950
D5961~D5964
+B
SYSTEM 6V VOLTAGE REGULATOR
Q5803
FP5833
D5950~D5953
T5950
T5951
+B
15V VOLTAGE REGULATOR
SUB TRANSFORMER
Q5808
Q5804, Q5806, Q5807
D5954~D5957
JK5950
AC INLET
RL5950
F1
+B
5V VOLTAGE REGULATOR
CURRENT STABILISER/ LIMIT SWITCH/ 10V VOLTAGE REGULATOR
Z5950
FP5950
DC_DET
Q5951
POWER TRANSFORMER
D5959
−B
VOLTAGE REGULATOR (-VP)
FP5951
+B
HP_SW
TO FL DISPLAY
E5800
SYNC
MUTE_H
Q5953
POWER SWITCH CONTROL

SIGNAL LINES

⇨ : MAIN SIGNAL LINE	⇨ : CD SIGNAL LINE	➡ : AM SIGNAL LINE	⇨ : PLAYBACK SIGNAL LINE
⇨ : FM OSC SIGNAL LINE	➡ : AM OSC SIGNAL LINE	➡ : FM/AM SIGNAL LINE	⇨ : RECORD SIGNAL LINE
⇨ : FM SIGNAL LINE	⇨ : AUX SIGNAL LINE	➡ : CD-DA (AUDIO/VIDEO) SIGNAL LINE	

( ) Indicates the Pin No. of Right Channel.

NOTE : Signal Lines are applicable to the Left Channel only.

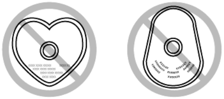
Disc information

Disc selection

This unit can play MP3 and CD-DA (digital audio) format audio CD-R and CD-RW that have been finalized (a process that enables CD-R/CD-RW players to play audio CD-R and CD-RW) upon completion of recording.
It may not be able to play some CD-R or CD-RW due to the condition of the recording.

Disc type	Logo	Indication used in instructions
Audio CD	COMPACT disc DIGITAL AUDIO	CD
CD-R/RW	–	CD MP3 (Depending on the recording format ➡ see above)

Do not:



- use irregularly shaped discs.
- attach extra labels and stickers.
- use discs with labels and stickers that are coming off or with adhesive exuding from under labels and stickers.
- attach scratch proof covers or any other kind of accessory.
- write anything on the disc.
- clean discs with liquids. (Wipe with a soft, dry cloth.)
- use discs printed with label printers available on the market.

To prevent damage

Always observe the following points:

- Load only 1 disc on the tray.
- Always stop the changer before loading or changing discs. Do not change discs while a disc is playing.
- Set the system on a flat, level surface.
- Always unload all discs before moving the unit.

Do not:

- set the unit on top of magazines, inclined surfaces, etc.
- move the unit while a tray is opening/closing, or when loaded.
- put anything except a disc in the tray.
- use cleaning discs or discs which are badly warped or cracked.
- disconnect the AC power supply cord from the household AC outlet during disc changing operation.

MP3 information

This unit can play MP3 files recorded on CD-R/RW with a computer.
Files are treated as tracks and folders are treated as albums.
This unit can access up to 999 tracks, 255 albums and 20 sessions.

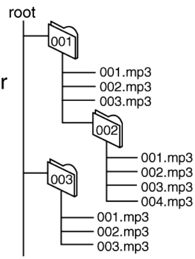
When making MP3 files to play on this unit

Disc format
Discs must conform to ISO9660 level 1 or 2 (except for extended formats).

File format
MP3 files must have the extension ".MP3" or ".mp3".

To play in a certain order
Prefix the folder and file names with 3-digit numbers in the order you want to play them.
Files may not be recorded in numbered order if the prefixes have different numbers of digits. For example: 1track.mp3, 2track.mp3, 10track.mp3.
However, some writing software may also cause recording to occur in a different order.

Example:



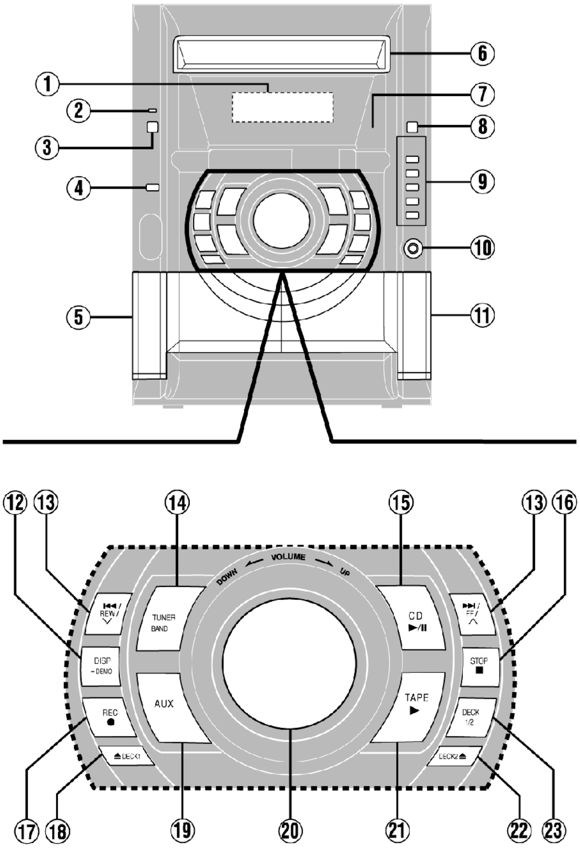
MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

Limitations on MP3 play

- This unit is not compatible with packet-write format.
- When both MP3 and CD-DA data is recorded on the disc over a number of sessions:
  - If the first session contains MP3 recordings, the unit will play from the MP3 made in that session till the session before the first CD-DA recordings.
  - If the first session contains CD-DA recordings, the unit will play only the recordings made in that session. The subsequent sessions will be ignored.
- Some MP3 may not be played due to the condition of the disc or recording.
- Recordings will not necessarily be played in the order you recorded them.
- Lower case letters will be displayed as upper case.

Front panel controls

Main unit


①
②
③
④
⑤
⑥
⑦
⑧
⑨
⑩
⑪
⑫
⑬
⑭
⑮
⑬
⑯
VOLUME
DOWN
UP
⏮/ REW/ ∨
TUNER BAND
CD ►/❚❚
⏭/ FF/ ∧
DISP –DEMO
STOP ■
AUX
TAPE ►
REC ●
DECK 1/2
⏏DECK1
DECK2⏏
⑰
⑱
⑲
⑳
㉑
㉒
㉓

① **Display**

② **AC supply indicator [AC IN]**
This indicator lights when the unit is connected to the AC mains supply.

③ **Standby/on switch [⏻/I]**
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

④ **Super sound EQ button [SUPER SOUND EQ]**

⑤ **Deck 1 cassette holder**

⑥ **Disc tray**

⑦ **Remote control signal sensor**

⑧ **CD tray open/close button [⏏, OPEN/CLOSE]**

⑨ **CD direct play buttons [1 ~ 5]**

⑩ **Headphone jack [PHONES]**

⑪ **Deck 2 cassette holder**

Center console

⑫ **Display, demonstration button [DISP, –DEMO]**

⑬ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust buttons [⏮/REW/∨, ⏭/FF/∧]**

⑭ **Tuner/band select button [TUNER, BAND]**

⑮ **CD play/pause button [►/❚❚, CD]**

⑯ **Stop/program clear button [■, STOP]**

⑰ **Record button [●, REC]**

⑱ **Deck 1 open button [⏏ DECK1]**

⑲ **AUX button [AUX]**

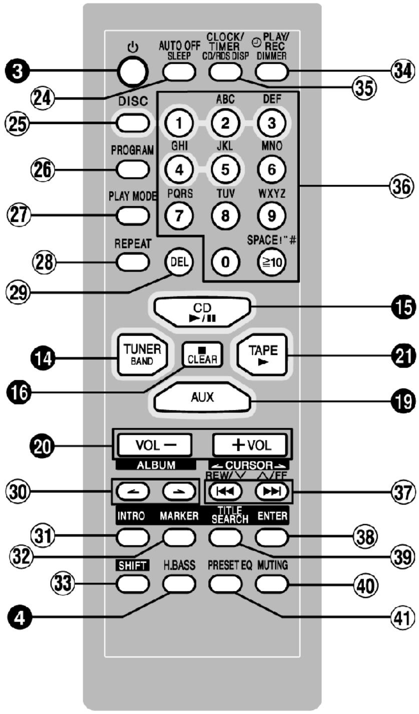
⑳ **Volume control [VOLUME DOWN, UP]**

㉑ **Tape play button [►, TAPE]**

㉒ **Deck 2 open button [DECK2 ⏏]**

㉓ **Deck select button [DECK 1/2]**

Remote control


❸
⏻
AUTO OFF SLEEP
CLOCK/ TIMER CD/RDS DISP
⏲ PLAY/ REC DIMMER
㉞
㉔
㉟
DISC
ABC
DEF
㉕
1
2
3
PROGRAM
GHI
JKL
MNO
㉖
4
5
6
㊱
PLAY MODE
PQRS
TUV
WXYZ
㉗
7
8
9
REPEAT
SPACE!"#
㉘
DEL
0
≧10
㉙
CD ►/❚❚
⓯
TUNER BAND
■ CLEAR
TAPE ►
⓮
㉑
⓰
AUX
⓳
VOL –
+VOL
⓴
ALBUM
CURSOR
REW/∨
∧/FF
㉚
㊲
INTRO
MARKER
TITLE SEARCH
ENTER
㉛
㊳
㉜
㊴
SHIFT
H.BASS
PRESET EQ
MUTING
㉝
㊵
❹
㊶

Buttons such as ❸ function in exactly the same way as the buttons on the main unit.

㉔ **Sleep timer + Auto off button [SLEEP, AUTO OFF]**

㉕ **Disc button [DISC]**

㉖ **Program button [PROGRAM]**

㉗ **Play mode select button [PLAY MODE]**
Use this for selecting CD play mode, tune mode, FM mode and deck select.

㉘ **Repeat button [REPEAT]**

㉙ **Delete button [DEL]**

㉚ **Album skip buttons [⏶, ⏷, ALBUM]**

㉛ **Intro button [INTRO]**

㉜ **Marker memory/recall button [MARKER]**

㉝ **Shift button [SHIFT]**
To use functions labeled in orange ※:
While pressing [SHIFT], press the corresponding button.
※ For buttons [AUTO OFF], [CLOCK/TIMER] and [⏲PLAY/REC]

㉞ **Dimmer + Play timer/record timer button [DIMMER, ⏲PLAY/REC]**

㉟ **CD display + Clock/timer button [CD DISP, CLOCK/TIMER]** .

㊱ **Numbered, character buttons [≧10, 1–9, 0, A-Z, SPACE!"#]**

㊲ **CD skip/search, tape fast-forward/rewind, tune/preset channel select, time adjust, cursor buttons [⏮, REW/∨, ⏶ CURSOR, ⏭, ∧/FF, CURSOR ⏷]**

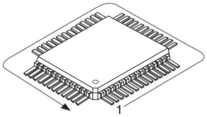
㊳ **Enter button [ENTER]**

㊴ **Title search mode select button [TITLE SEARCH]**

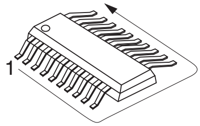
㊵ **Muting button [MUTING]**

㊶ **Preset EQ select button [PRESET EQ]**

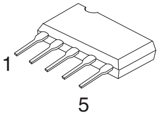
C2CBJG000565 (100P)
C0HBB0000044 (48P)
MN6627953HB (80P)



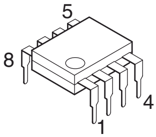
AN7348S-E1 (24P)
LA1833NMNTLM (24P)
LC72131MDTRM (20P)
C1BB00000732 (32P)



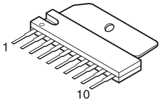
C1AA00000612



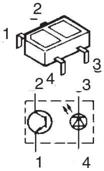
C0AABA000009



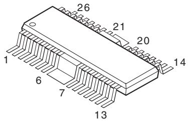
C0GAM0000005



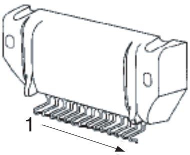
CNB13030R2AU



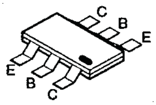
AN8739SBTE2


26
21
20
14
1
6
7
13

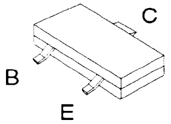
RSN35H2B-P (14P)



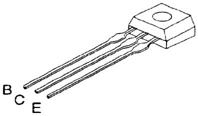
B1GFGCAA0001



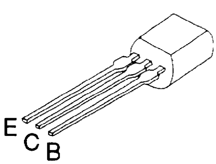
2SB0709AHL
2SD0601AHL
B1ADCF000001
B1ABCE000016
B1GDCFJJ0023
B1GBCFJJ0051



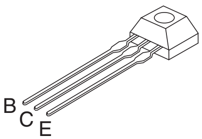
B1AAAC000016
B1AAAD000015
B1AAGC000007
B1GACFGG0004



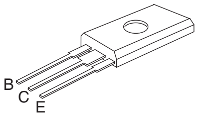
B1ACKD000005
B1AAKD000009
B1AARC000002
B1GCCFJJ0015
B1GCCFGA0005
2SD0592ARA



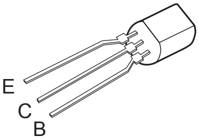
B1ACCF000063
B1GACFJJ0016
B1GACFLL0007



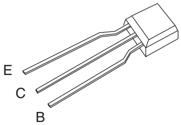
B1BACD000017



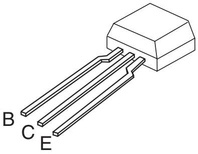
2SB0621AHA



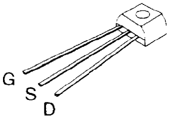
B1AABC000003



B1AACF000064



2SK544F-AC



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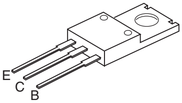

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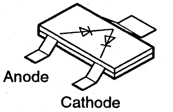
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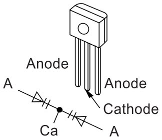
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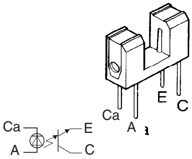
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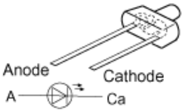
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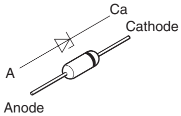
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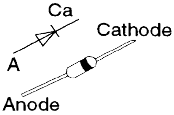
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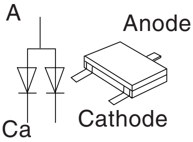
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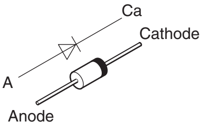
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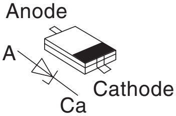
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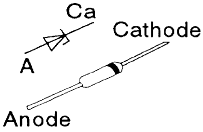
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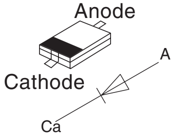
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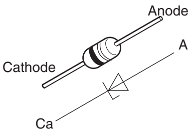
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